

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA160RXA

PASSWORD:

LOGINID/PASSWORD REJECTED

The loginid and/or password sent to STN were invalid.
You either typed them incorrectly, or line noise may
have corrupted them.

Do you wish to retry the logon?

Enter choice (y/N):

Do you wish to use the same loginid and password?

Enter choice (y/N):

Enter new loginid (or press [Enter] for SSSPTA160RXA):

Enter new password:

LOGINID:

LOGINID:SSSPTA1600RXA

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

***** Welcome to STN International *****

NEWS	1	Web Page URLs for STN Seminar Schedule - N. America
NEWS	2	"Ask CAS" for self-help around the clock
NEWS	3 FEB 25	CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered
NEWS	4 FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	5 FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	6 FEB 28	MEDLINE/LMEDLINE reloaded
NEWS	7 MAR 02	GBFULL: New full-text patent database on STN
NEWS	8 MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	9 MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	10 MAR 22	KOREAPAT now updated monthly; patent information enhanced
NEWS	11 MAR 22	Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS	12 MAR 22	PATDPASPC - New patent database available
NEWS	13 MAR 22	REGISTRY/ZREGISTRY enhanced with experimental property tags

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer
agreement. Please note that this agreement limits use to scientific

research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

***** STN Columbus *****

FILE 'HOME' ENTERED AT 15:22:16 ON 01 APR 2005

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 15:22:23 ON 01 APR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 31 MAR 2005 HIGHEST RN 847735-80-2

DICTIONARY FILE UPDATES: 31 MAR 2005 HIGHEST RN 847735-80-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

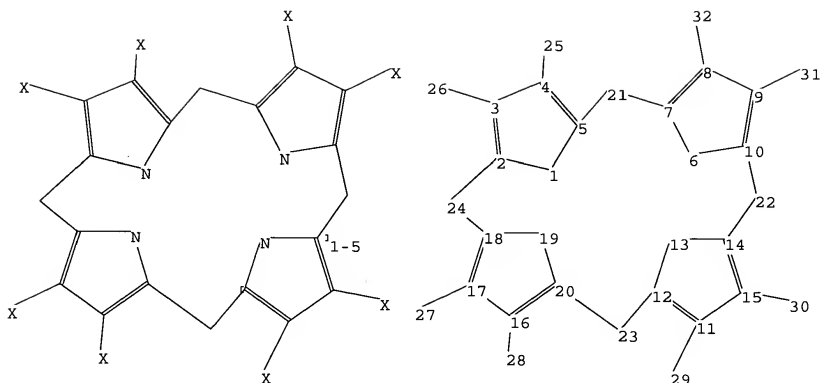
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\09939514.str



```

chain nodes :
25 26 27 28 29 30 31 32
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24
chain bonds :
3-26 4-25 8-32 9-31 11-29 15-30 16-28 17-27
ring bonds :
1-2 1-5 2-3 2-24 3-4 4-5 5-21 6-7 6-10 7-8 7-21 8-9 9-10 10-22 11-12
11-15 12-13 12-23 13-14 14-15 14-22 16-17 16-20 17-18 18-19 18-24 19-20
20-23
exact/norm bonds :
1-2 1-5 2-3 2-24 3-4 4-5 5-21 6-7 6-10 7-8 7-21 8-9 9-10 10-22 11-12
11-15 12-13 12-23 13-14 14-15 14-22 16-17 16-20 17-18 18-19 18-24 19-20
20-23
exact bonds :
3-26 4-25 8-32 9-31 11-29 15-30 16-28 17-27
isolated ring systems :
containing 1 :

```

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:CLASS 26:CLASS 27:CLASS 28:CLASS
29:CLASS 30:CLASS 31:CLASS 32:CLASS

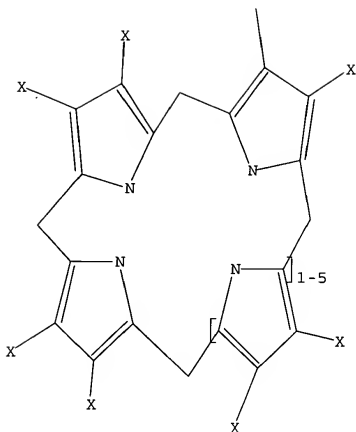
```

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 15:22:39 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 187 TO ITERATE

100.0% PROCESSED 187 ITERATIONS
SEARCH TIME: 00.00.01

11 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2920 TO 4560
PROJECTED ANSWERS: 22 TO 418

L2 11 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 15:22:43 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3675 TO ITERATE

100.0% PROCESSED 3675 ITERATIONS
SEARCH TIME: 00.00.01

127 ANSWERS

L3 127 SEA SSS FUL L1

=> s l3 and caplus/lc
45300192 CAPLUS/LC

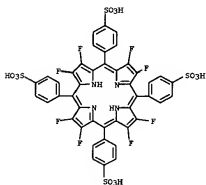
L4 122 L3 AND CAPLUS/LC

=> s l3 not l4

L5 5 L3 NOT L4

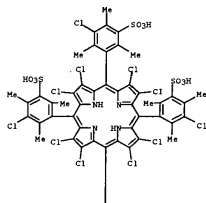
=> d 15 1-5

L5 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 756473-32-2 REGISTRY
 ED Entered STN: 04 Oct 2004
 CN Benzenesulfonic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octafluoro-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis- (9CI) (CA INDEX NAME)
 HF C44 H22 F8 N4 O12 S4
 CI COM
 SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 738554-86-4 REGISTRY
 ED Entered STN: 03 Sep 2004
 CN Benzenesulfonic acid, 3,3',3'',3'''-(2,3,7,8,12,13,17,18-octachloro-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[5-chloro-2,4,6-trimethyl- (9CI) (CA INDEX NAME)
 HF C56 H42 Cl12 N4 O12 S4
 CI COM
 SR CA

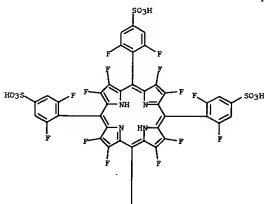


PAGE 1-A



PAGE 2-A

L5 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 683215-74-5 REGISTRY
 ED Entered STN: 03 Jun 2004
 CN Benzenesulfonic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octafluoro-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis(3,5-difluoro- (9CI) (CA INDEX NAME)
 HF C44 H14 F16 N4 O12 S4
 CI COM
 SR CA

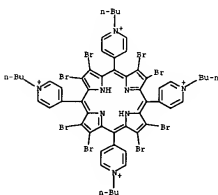


PAGE 1-A

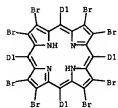


PAGE 2-A

L5 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 432038-74-5 REGISTRY
 ED Entered STN: 19 Jun 2002
 CN Pyridylsulfone, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[1-butyl- (9CI) (CA INDEX NAME)
 HF C36 H54 Br8 N8
 CI COM
 SR CA



L5 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2005 ACS on STW
 RN 206349-59-9 REGISTRY
 RU Entered STW: 04 Jun 1998
 CN Pyridinium, (2,3,7,8,12,13,17,18-octabromo-21H,23H-porphina-5,10,15,20-
 tetrayl)tetrakis[1-methyl- (9CI) (CA INDEX NAME)
 MF C44 H52 Br8 N8
 CI 1DS, COM
 SR CA



=> fil caplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
175.99	176.20

FILE 'CAPLUS' ENTERED AT 15:24:00 ON 01 APR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 1 Apr 2005 VOL 142 ISS 15
FILE LAST UPDATED: 31 Mar 2005 (20050331/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 15:22:16 ON 01 APR 2005)

FILE 'REGISTRY' ENTERED AT 15:22:23 ON 01 APR 2005

	STRUCTURE UPLOADED
L1	
L2	11 S L1
L3	127 S L1 FULL
L4	122 S L3 AND CAPLUS/LC
L5	5 S L3 NOT L4

FILE 'CAPLUS' ENTERED AT 15:24:00 ON 01 APR 2005

=> s 14

L6 148 L4

=> d ibib abs histr 16 1-148

'HISTR' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS	-----	GI and AB
ALL	-----	BIB, AB, IND, RE
APPS	-----	AI, PRAI
BIB	-----	AN, plus Bibliographic Data and PI table (default)
CAN	-----	List of CA abstract numbers without answer numbers
CBIB	-----	AN, plus Compressed Bibliographic Data
DALL	-----	ALL, delimited (end of each field identified)
DMAX	-----	MAX, delimited for post-processing
FAM	-----	AN, PI and PRAI in table, plus Patent Family data
FBIB	-----	AN, BIB, plus Patent FAM

IND ----- Indexing data
 IPC ----- International Patent Classifications
 MAX ----- ALL, plus Patent FAM, RE
 PATS ----- PI, SO
 SAM ----- CC, SX, TI, ST, IT
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
 SCAN must be entered on the same line as the DISPLAY,
 e.g., D SCAN or DISPLAY SCAN)
 STD ----- BIB, IPC, and NCL

 IABS ----- ABS, indented with text labels
 IALL ----- ALL, indented with text labels
 IBIB ----- BIB, indented with text labels
 IMAX ----- MAX, indented with text labels
 ISTD ----- STD, indented with text labels

 OBIB ----- AN, plus Bibliographic Data (original)
 OIBIB ----- OBIB, indented with text labels

 SBIB ----- BIB, no citations
 SIBIB ----- IBIB, no citations

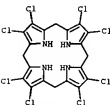
 HIT ----- Fields containing hit terms
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
 containing hit terms
 HITRN ----- HIT RN and its text modification
 HITSTR ----- HIT RN, its text modification, its CA index name, and
 its structure diagram
 HITSEQ ----- HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and
 its structure diagram
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 KWIC ----- Hit term plus 20 words on either side
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
 ENTER DISPLAY FORMAT (BIB):end

=> d ibib abs hitstr 1-148

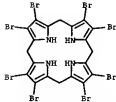
L6 ANSWER 1 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2004:925092 CAPLUS
 DOCUMENT NUMBER: 141:34685
 TITLE: Density functional theory studies of
 p-substituent effect on conformational preference
 and anion binding ability of calix[4]pyrroles
 AUTHOR(S): Wang, Bi-Fei; Wu, Yundong
 CORPORATE SOURCE: Department of Chemistry, The Hong Kong University of
 Science & Technology, Hong Kong, Rep. Rep. China
 SOURCE: AKOSYOC (Gainesville, FL, United States) (2004), (9),
 96-110
 CODIN: ACPUAR
 URL: http://www.arkat-usa.org/ark/journal/2004/109_Yua
 a/CY-1155L/CY-1155L.pdf
 PUBLISHER: Arkat USA Inc.
 DOCUMENT TYPE: Journals (online computer file)
 LANGUAGE: English
 AB The conformational features and anion-binding properties of a series of
 p-octasubstituted calix[4]pyrroles have been investigated by the B3LYP
 method of d. functional theory with the 6-31G** basis set both in the gas
 phase and in CHCl3 solution. The calixs. demonstrated that adjusting the
 electronic properties of p-substituents on the pyrrole rings do
 change the anion-binding ability of calix[4]pyrroles. With the
 B3LYP/6-31G** method in CHCl3 solution, the relative binding energies
 follow
 the order of electron withdrawing abilities of the substituents, i.e. CN
 (18 kcal/mol) > Cl (7 kcal/mol) > Br (4 kcal/mol) > H (0 kcal/mol).
 Calixs. also indicate that the energy difference between the most stable
 1,3-alternate conformation and the least stable cone-conformation that is
 for anion-binding is increased by electron-withdrawing p-substituents
 CN, Cl, and Br. Further anal. on dipyrromethane models reveals that
 the destabilization of the cone-conformation is mainly caused by electrostatic
 interactions between the p-substituents on the adjacent pyrrole
 rings. Our results thus provide useful information for designing stronger
 and more efficient calix[4]pyrrole-based anion binding receptors.
 IT 777096-94-3 CAPLUS
 777096-94-3 777096-94-4 777097-11-7
 777097-12-8
 RUL P2P (Properties)
 AB [DFT Studies of p-Substituent Effect on Conformational Preference
 and Anion Binding Ability of Calix[4]Pyrroles]
 RN 777096-94-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20,22,24-
 hexahydro- (SCI) (CA INDEX NAME)



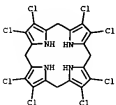
RN 777096-95-4 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20,22,24-hexahydro-
 (SCI) (CA INDEX NAME)

L6 ANSWER 1 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 1 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

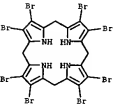


RN 777097-11-7 CAPLUS
 CN Fluoride, compd. With 2,3,7,8,12,13,17,18-octabromo-5,10,15,20,22,24-
 hexahydro-21H,23H-porphine (1:1) (SCI) (CA INDEX NAME)



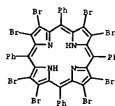
● p-

RN 777097-12-8 CAPLUS
 CN Fluoride, compd. With 2,3,7,8,12,13,17,18-octabromo-5,10,15,20,22,24-
 hexahydro-21H,23H-porphine (1:1) (SCI) (CA INDEX NAME)



● p-

L6 ANSWER 2 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2004:594761 CAPLUS
 DOCUMENT NUMBER: 141:266257
 TITLE: Conformational analysis of octa- and tetrabromo
 tetraphenylporphyrins and their Ni(II) and Tb(III)
 complexes
 AUTHOR(S): Gruden-Pavlovic, Maja; Grubisic, Sonja; Niketic,
 Svetozar R.
 CORPORATE SOURCE: Belgrade, RU-11001,
 Journal of Inorganic Biochemistry (2004), 98(8),
 1292-1302
 CODIN: JIBIDJ; ISSN: 0162-0134
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journals
 LANGUAGE: English
 AB Mol. mechanics (MM) calcs. were used to analyze the puckering of
 metalloporphyrins as a function of metal ion size and the position of
 substituents on the porphyrin periphery, on a three series of octa- and
 tetrabromo tetraphenylporphyrins: without metal, and with Ni(II), and
 Tb(III) as representative small and large metal ions, resp. Mol. energy
 optimization calcs. were carried out using the Conquest Force Field
 (CFF) program, with the parameters developed previously and new parameters
 for bromine atom. Normal-coordinate structural decomposition (NCD) anal.
 was
 performed on the equilibrium structures obtained by MM calcs. The
 conformers
 are also stereocent. characterized, compared with available X-ray
 structures and with the conformers obtained in our previous MM study using
 calcs. instead of bromo p-pyrrole substituents.
 IT 132124-46-3 CAPLUS
 132124-46-3
 AB [Conformational Anal. of Octa- and Tetrabromo Tetraphenylporphyrine and
 their Ni(II) and Tb(III) complexes]
 RN 132124-46-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (SCI) (CA INDEX NAME)

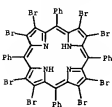


REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:356825 CAPLUS
 DOCUMENT NUMBER: 141:359406
 TITLE: Highly brominated porphyrins: synthesis, structure and their properties
 AUTHOR(S): Murappa, Puttaiah; Purushothaman, Bhavan; Vittal, Jagadees J.
 CORPORATE SOURCE: Department of Chemistry, Indian Institute of Technology-Madras, Chennai, 600 036, India
 SOURCE: Journal of Porphyrins and Phthalocyanines (2003), 7(9), 100, 982-992
 CODEN: JPORFZ ISSN: 1088-4246
 PUBLISHER: Society of Porphyrins & Phthalocyanines
 DOCUMENT TYPE: Journal
 LANGUAGE: English

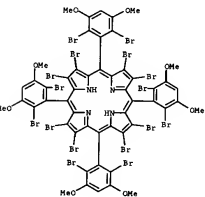
AB This article reports the 1st perbromination of *β*-pyrrole and *meso*-Ph groups of the 5,10,15,20-tetrakis(3',5'-dimethoxyphenyl)porphyratocopper(II) to generate highly brominated porphyrins. 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2',6'-dibromo-3',5'-dimethoxyphenyl)porphyratocopper(II), CuT(3',5'-OMe)PBr16 complex. The crystal structure exhibited unusual five-coordination geometry with saddle shaped conformation of the porphyrin core. CuT(3',5'-OMe)PBr16 and its metal complexes exhibited large anodic shift of oxidation potentials with marginal changes in reduction potentials relative to their corresponding octabromotetraphenylporphyrin, MTPBr16 derivs. The enhanced electron deficiency of the ZnT(3',5'-OMe)PBr16 complex was probed by axial ligation of various Lewis bases with differing pKa values. The ZnT(3',5'-OMe)PBr16 complex exhibited decrease in equilibrium constant for the ligation of bases relative to sterically unhindered CuTPBr16. This was ascribed to the steric induced by the bulky *ortho*-bromo Ph substituents that prevents the facile binding of Lewis bases to the Zn(II)-center.

IT 132124-86-3
 RI: CFS (Chemical process); PEP (Physical, engineering or chemical process); FRP (Properties); PROC (Process)
 RN 775318-89-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



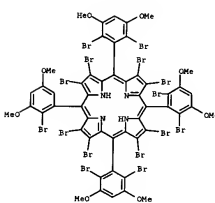
IT 775318-93-9P 775318-94-0P
 RI: SPN (Synthetic preparation); PREP (Preparation)
 RN 775318-93-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5-(2-bromo-3,5-dimethoxyphenyl)-10,15,20-tris(2,6-dibromo-3,5-dimethoxyphenyl)- (SCI) (CA INDEX NAME)

L6 ANSWER 6 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 775318-89-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,6-dibromo-3,5-dimethoxyphenyl)- (SCI) (CA INDEX NAME)

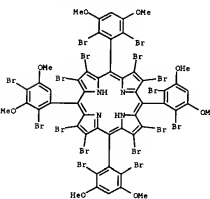


REFERENCE COUNT: 111 THERE ARE 111 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



RN 775318-94-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5-(2,4-dibromo-3,5-dimethoxyphenyl)-10,15,20-tris(2,6-dibromo-3,5-dimethoxyphenyl)- (SCI) (CA INDEX NAME)



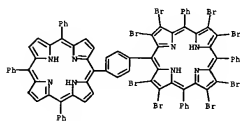
IT 775318-89-3P
 RI: CFS (Chemical process); PEP (Physical, engineering or chemical process); FRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
 UP: Preparation, cyclic voltammetry and reactant for preparation of nickel and zinc highly brominated porphyrin complexes)

L6 ANSWER 7 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:356825 CAPLUS
 DOCUMENT NUMBER: 141:310404
 TITLE: Synthesis and electrochemical investigation of covalently linked porphyrin dimers containing a *β*-brominated subunit. Crystal structure of H2(tripp-tpb)Br16
 AUTHOR(S): Du, Zhongping; Tagliatesta, Pietro; Senge, Mathias O.; Zhao, Jiaoyan; Kadish, Irl M.
 CORPORATE SOURCE: Department of Chemistry, University of Houston, Houston, TX, 77204-5003, USA
 SOURCE: Journal of Porphyrins and Phthalocyanines (2003), 7(9), 101, 595-609
 CODEN: JPORFZ ISSN: 1088-4246
 PUBLISHER: Society of Porphyrins & Phthalocyanines
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Two *meso*-tetraphenylporphyrin-type hetero-dimers containing a partly or completely *β*-brominated subunit were synthesized and characterized by UV-visible spectroscopy, cyclic voltammetry and spectro-electrochem., showing the presence of low electronic interactions between the two subunits. The investigated compds. are represented as H2(tripp-tpb)Br16 and H2(tripp-tpb)Br16 (H₂ = 2H, 2n, 2m, 2o, Co and Cu) where tripp-tpb(Br4) is the tetra-anion of 1-[5-(10,15,20-triphenylporphyrinyl)]-4-[10-(5,3,12,13-tetra-bromo-porphyrinyl)]-benzene and tripp-tpb(Br4) is the tetra-anion of 1-[5-(10,15,20-triphenylporphyrinyl)]-4-[10-(2,3,7,8,12,13,17,18-octabromo-porphyrinyl)]-benzene. One of the synthesized dimers, H2(tripp-tpb(Br4))Br16, was characterized by a single-crystal X-ray investigation.

IT 552897-02-2P
 RI: FRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 UP: Synthesis, crystal structure, cyclic voltammetry, and electrochem. investigation of covalently linked porphyrin dimers containing a *β*-brominated subunit)

RN 552897-02-2 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15-triphenyl-20-[4-(10,15,20-triphenyl-21H,23H-porphine-5-yl)phenyl]- (SCI) (CA INDEX NAME)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 8 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER:

2004134172 CAPLUS

DOCUMENT NUMBER:

141100158

TITLE:

Theoretical AM1 study of acidity of porphyrins, azaporphyrins and porphyrazines

AUTHOR(S):

Stushin, Pavel A.
Department of Organic Chemistry, Ivanovo State
University of Chemical Technology, Ivanovo, 153460,
Russia

SOURCE:

Journal of Porphyrins and Phthalocyanines (2003), 7(11
4 12), 813-832

PUBLISHER:

Society of Porphyrins & Phthalocyanines

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The structure-acidity relationship in the series of non-substituted, meso- or p-substituted and p,p'-substituted porphyrins and porphyrazines have been studied using the AM1 method with UHF basis set. With this purpose, heats of formation have been determined for the geometry optimized structures of the free base macrocycles and corresponding monomeric and dimeric forms by deprotonation. Calculated first deprotonation enthalpy values show correlation with available exper. pKa values and can be used for prediction of acidity. For porphyrazines having electron-withdrawing substituents a w-deficient substituted heteroarenes the dimers have lower heats of formation than the deprotonated upon dimers. In basic solvents (pyridine, DMF). For porphyrazines with annulated 5-member heteroarenes it is predicted that deprotonation of peripheral NH groups should occur more easily than deprotonation of the internal NH groups. The influence of different types of annulation of 5- and 6-membered heteroarenes to the porphyrazine core on the stability of the macrocyclic system and its acidity are also discussed.

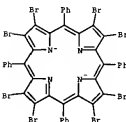
IT 717911-35-6

RI: FEP (Properties)

(dilation, formation enthalpy) theor. AM1 structure-acidity study of porphyrins, azaporphyrins and porphyrazines

RN 717911-35-6 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, ion(-) (SCI) (CA INDEX NAME)



IT 131214-66-3

RI: FEP (Properties)

(formation enthalpy and deprotonation enthalpy) theor. AM1 structure-acidity study of porphyrins, azaporphyrins and porphyrazines

16 ANSWER 9 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER:

2004137463 CAPLUS

DOCUMENT NUMBER:

141142214

TITLE:

Covalently linked bisporphyrins bearing tetraphenylporphyrin and pterbonomorphyrin units: synthesis and their properties

AUTHOR(S):

Bhargava, Putalishri Krishnan, V.
Department of Chemistry, Indian Institute of
Technology - Madras, Chennai, 600 036, India

SOURCE:

Journal of Chemical Sciences (Bangalore, India)
(2004), 116(2), 71-78

PUBLISHER:

Indian Academy of Sciences

DOCUMENT TYPE:

Journal

LANGUAGE:

English

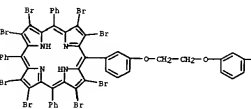
AB A series of covalently linked bisporphyrins bearing neo-tetraphenylporphyrin (TFP) and octabromotetraphenylporphyrin (OTFP) units have been synthesized and characterized. Electrochromic studies on these bisporphyrins showed an anodic shift (approx. 30-60 mV) of the TFP unit and a cathodic shift (approx. 40-80 mV) of OTFP in redox potentials. Further, steady-state fluorescence studies on bisporphyrins indicated dramatic decrease in fluorescence quantum yields of the TFP moiety. Electrochromic, redox and fluorescence data seem to suggest the possible existence of intramolecular interactions in these bisporphyrins.

IT 770714-96-0P

RI: CFS (Chemical process); FEP (Physical, engineering or chemical process); FEP (Properties); FEP (Reaction); FEP (Synthesis); FEP (Preparation); FPEC (Process); RACT (Reactant or reagent) (Synthesis, electrochromic, redox and fluorescence properties of covalently linked bisporphyrins and their metal complexes bearing tetraphenylporphyrin and pterbonomorphyrin)

RN 770714-96-0 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15-triphenyl-20-[3-{2-[15-(10,15,20-triphenyl-21H,23H-porphin-5-yl)phenyl]ethoxy}ethyl]phenyl- (SCI) (CA INDEX NAME)

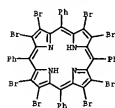


PAGE 1-A

16 ANSWER 9 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

RN 131214-66-3 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, ion(-) (SCI) (CA INDEX NAME)



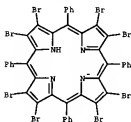
IT 717911-25-6

RI: FEP (Properties)

(formation, formation enthalpy) theor. AM1 structure-acidity study of porphyrins, azaporphyrins and porphyrazines

RN 717911-25-6 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, ion(-) (SCI) (CA INDEX NAME)



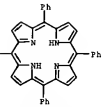
REFERENCE COUNT:

65

THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 9 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

PAGE 1-B

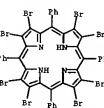


IT 131214-66-3P 770715-01-0P

RI: CFS (Chemical process); FEP (Physical, engineering or chemical process); FEP (Properties); FEP (Reaction); FEP (Synthesis); FEP (Preparation); FPEC (Process) (Synthesis, electrochromic, redox, and fluorescence properties of covalently linked bisporphyrins and their metal complexes bearing tetraphenylporphyrin and pterbonomorphyrin)

RN 131214-66-3 CAPLUS

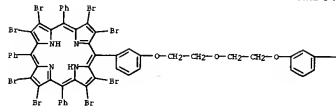
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, ion(-) (SCI) (CA INDEX NAME)



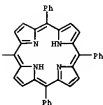
RN 770715-01-0 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15-triphenyl-20-[3-{2-[15-(10,15,20-triphenyl-21H,23H-porphin-5-yl)phenyl]ethoxy}ethyl]phenyl- (SCI) (CA INDEX NAME)

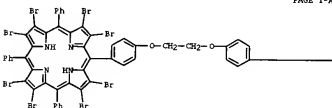
PAGE 1-A



PAGE 1-B

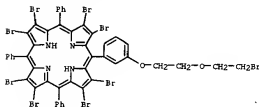


IT 770714-93-99
 RI: FRP (Properties); RCT (Reactant); SPN (Synthetic preparation); FRP (Preparation); DACT (Reactant or reagent)
 (synthesis, electrochem. redox, and fluorescence properties of covalently linked porphyrins and their metal complexes bearing tetraphenylporphyrin and perrhomporphyrin)
 RN 770714-93-9 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15-triphenyl-20-(4-(2-bromoethoxy)ethyl)phenyl-10,15,20-triphenyl-1- (9CI) (CA INDEX NAME)



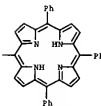
PAGE 1-A

L6 ANSWER 9 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 RN 770714-94-8 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5-10-(12-bromoethoxy)ethylphenyl-10,15,20-triphenyl-1- (9CI) (CA INDEX NAME)

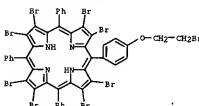


REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

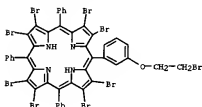
PAGE 1-B



IT 213414-00-7F 770714-93-7F 770714-94-8F
 RI: RCT (Reactant); SPN (Synthetic preparation); FRP (Preparation); DACT (Reactant or reagent)
 (synthesis, electrochem. redox, and fluorescence properties of covalently linked porphyrins and their metal complexes bearing tetraphenylporphyrin and perrhomporphyrin)
 RN 213414-00-7 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5-(4-(2-bromoethoxy)phenyl)-10,15,20-triphenyl-1- (9CI) (CA INDEX NAME)



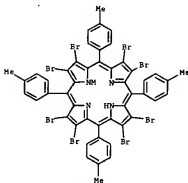
RN 770714-93-7 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5-(3-(2-bromoethoxy)phenyl)-10,15,20-triphenyl-1- (9CI) (CA INDEX NAME)



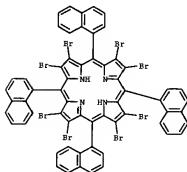
L6 ANSWER 10 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2003:181478 CAPLUS
 DOCUMENT NUMBER: 146:76935
 TITLE: Solvent effects on some meso-aryl substituted octabromoporphyrins
 AUTHOR(S): George, Pesirol G.; Padmanabhan, M.
 CORPORATE SOURCE: School of Chemical Sciences, Mahatma Gandhi University, Kottayam, 686 560, India
 SOURCE: Proceedings of Indian Academy of Sciences, Chemical Sciences (2003); 115(4): 365-271
 CODEN: PIASDH; ISSN: 0255-4334
 PUBLISHER: Indian Academy of Sciences
 JOURNAL: Journal
 LANGUAGE: English

AB A series of porphyrins with tolyl and naphthyl substituents at the meso positions, their octabromo deriva. (OBP) with R substituents at the meso positions are synthesized and characterized by chemical anal., IR NMR and electronic spectral studies. It is seen that all the OBPs exhibit pronounced red shifts in both the Soret and Q bands of their electronic spectra compared to their non-brominated form in various polar and nonpolar solvents, the energy difference Δλ_{Soret-Q} being in the range 2300-2700 cm⁻¹. The high energy S band of naphthyl porphyrins (both brominated and nonbrominated) are found to be more red-shifted than that of tolyl porphyrins, owing to the noticeable anisotropic effect of the naphthyl groups. Detailed spectral studies reveal that while none of the bands, all the OBPs manifest significant shifts depending on the nature of solvents. Solvent-solute interaction can be considered to be of strong dipole-dipole nature for OBPs with polar solvents and of π-π type with aromatic non-polar solvents. In the brominated form we find two categories of porphyrins exhibiting distinctly different absorption phenomena in aromatic solvents. The OBPs having meso-groups not shielding the porphyrin π-framework exhibit addnl. absorption peaks (split Soret peaks and broadened bands) in some aromatic solvents. This could be explained in terms of π-π type donor-acceptor (DA) complex formation between such bromoporphyrins (acceptor) and the aromatic solvent mols. (donor) that is not possible for OBPs that have bulky meso groups that block the approach of aromatic solvent mols. close to the porphyrin framework.

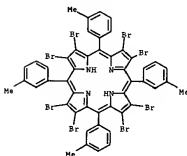
IT 640730-28-4 640730-28-3 640730-27-4
 640730-28-4 640730-28-6
 RI: FRP (Properties)
 (solvent effects on absorption spectra of meso-aryl substituted octabromoporphyrins)
 RN 182423-35-4 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(4-methylphenyl)-1- (9CI) (CA INDEX NAME)



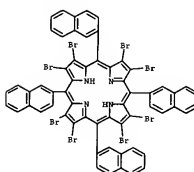
HN 640730-26-3 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetra-1-naphthalenyl- (SCI) (CA INDEX NAME)



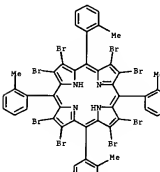
HN 640730-27-4 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetra-2-naphthalenyl- (SCI) (CA INDEX NAME)



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

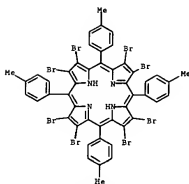


HN 640730-28-5 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2-methylphenyl)- (SCI) (CA INDEX NAME)

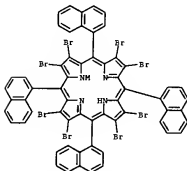


HN 640730-29-6 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(3-methylphenyl)- (SCI) (CA INDEX NAME)

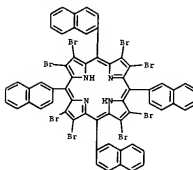
ACCESSION NUMBER: 2005-762928 CAPLUS
DOCUMENT NUMBER: 140-103814
TITLE: Studies on some new meso-aryl substituted octabromo-porphyrins and their Zn(II) derivatives
AUTHOR(S): George, Regional G.; Padmanabhan, M.
CORPORATE SOURCE: School of Chemical Sciences, Mahatma Gandhi University, Kottayam, 686560, India
SOURCE: Polyhedron (2005), 22(23), 3145-3154
CODEN: PLYDIEJ ISSN: 0277-5387
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB: Porphyrins with various tolyl (H2TTP) and naphthyl substituents (H2NBP) at the meso-positions, their octabromo derive, (H2TBP and H2NBP) with Br substituents at Perylene positions and also their Zn(II) derive, were synthesized and characterized by IR NMR, electronic, fluorescence and electrochem. studies. These have the meso-carbons bonded to tolyl moieties at ortho-, meta- and para-positions of the tolyl groups and at the α - or β -position of the naphthyl group. For the octabromoporphyrins, pronounced deshielding of NH protons and a moderate shift of meso-aryl protons to a lower δ value are observed compared to their nonbrominated species. The electronic spectra of H2TTP and H2NBP have almost the same B and Q bands while the B band of their free-base analogs have H2NBP absorbing at a higher wavelength than H2TTP. All the octabromo derive, exhibit a pronounced red shift for both B and Q bands (compared to their nonbrominated forms) and show meso-substituent dependent change in both free-base and metalated forms. The above observations are interpreted in terms of moderate conjugative interaction of the aryl substituent with the π framework and also in terms of energy level reordering which alters the HOMO-LUMO gap. Consistent with the absorption spectral data the emission bands of all the bromoporphyrins also are red shifted considerably. Significant decrease in quantum yield (Φ) was observed for the bromo compds. While the Φ of nonbrominated porphyrins is higher than their Zn(II) derive, the reverse order is observed for the bromo derive. The ability of the Zn2+ ion to make the bromoporphyrins resistant to distortion by binding the central cavity can be attributed as the cause for this interesting observation. Cyclic voltammetric studies exhibit characteristic quasi-reversible/irreversible oxidation-reduction features for all the free-bases and Zn(II) derive. The bromo derive, however, manifest marginally harder oxidation and very easy reduction features. The data are interpreted in terms of electron withdrawing ability of Br atoms and to reordering of HOMO and LUMO levels due to distortion in the porphyrin ring.
IT 162423-38-4P 640730-26-3P 640730-27-4P 640730-28-5P 640730-29-6P
RI: CFS (Chemical process); PXP (Physical, engineering or chemical process); RXP (Properties); RCT (Reactant); SYN (Synthetic preparation); PRPZ (Preparation); PROC (Process); RACT (Reactant or reagent) [Preparation, electrochem. properties, metalation with zinc and electronic and fluorescence spectra of meso-tetraaryl substituted octabromoporphyrins]
HN 162423-38-4 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(4-methylphenyl)- (SCI) (CA INDEX NAME)



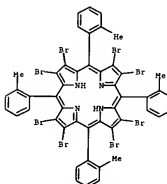
RN 640730-26-3 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetra-1-naphthalenyl- (SCI) (CA INDEX NAME)



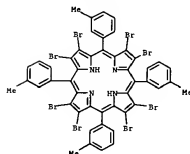
RN 640730-27-4 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetra-2-naphthalenyl- (SCI) (CA INDEX NAME)



RN 640730-28-5 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2-methylphenyl)- (SCI) (CA INDEX NAME)

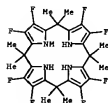


RN 640730-29-6 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(3-methylphenyl)- (SCI) (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:62320 CAPLUS
DOCUMENT NUMBER: 135:376552
TITLE: Fluorinated calixpyrroles: anion-binding extractants that reduce the Hofmeister Bias
AUTHOR(S): Levitskaia, Tatiana G.; Marques, Manuel; Sessler, Jonathan L.; Shriver, James A.; Mercouier, Thomas; Moyer, Bruce A.
CORPORATE SOURCE: Chemical Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN, 37830-615, USA
SOURCE: Chemical Communications (Cambridge, United Kingdom) 1003, (17), 2248-2249
CODEN: CHCOFP; ISSN: 1359-7345
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB β -Octafluoro-meso-octamethylcalix[4]pyrrole (I) and β -octafluoro-meso-decamethylcalix[5]pyrrole (II) were found to extract cesium salts of smaller anions (bromide and chloride for I and nitrate for II) as effectively as that of iodide into nitrobenzene (NB) thereby overcoming the Hofmeister Bias normally observed for processes of this type.
IT 311864-61-6
RE: PFP (Physical, engineering or chemical process); PFP (Properties); PFP (Physical process); PFC (Process) (cesium salt solvent exch with fluorinated calixpyrroles and attenuation of Hofmeister series)
RN 311864-61-6 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-5,5,10,10,15,15,20,20-octamethyl- (SCI) (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2003:56377 CAPLUS
 DOCUMENT NUMBER: 139:239081
 TITLE: Synthesis and Structural Characterization of Porphyrinic Eedynines: Geometric and Electronic Effects on Thermal and Photochemical Reactivity
 AUTHOR(S): Chandra, Tishy Kraft, Brian J.; Huffman, John C.; Zaleski, Jeffrey M.
 CORPORATE SOURCE: Department of Chemistry and Molecular Structure Center, Indiana University, Bloomington, IN, 47405-1102, USA
 SOURCE: Inorganic Chemistry (2003), 42(17), 5158-5172
 CODING: INOCALJ 1258: 2003-1650
 AMERICAN CHEMICAL SOCIETY
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: English
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 139:239081

AB The authors report the preparation of 5,10,15,20-tetraphenyl-2,3,7,8,12,13,17,18-octakis(phenylethynyl)porphyrin and its Ni(II), Cu(II), Mg(II), and Zn(II) complexes, as well as select trimethylsilylphenylethynyl derivatives. The x-ray structures of the octakis(phenylethynyl) compds. show systematic deviations from planarity [Ni(II), 0.283 Å; Zn(II), 0.004 Å] as a function of the central cation. These geometric distortions are reflected in bathochromic shifts of the Soret and Q bands [Ni(II), 497, 604, and 650 nm; Mg(II), 515, 595, 642, and 705 nm] which loosely correlate with increasing planarity of the structure. Similarly, vibrational modes involving the octa-substituted porphyrin core exhibit shifts to lower frequency as a function of increasing planarity in the solution-state resonance Raman spectra (Rsc = 501.7 nm) of these compds. Analogous trends are also observed in their solid-state electronic and resonance Raman spectra, indicating that the structural distortions within the octakis(phenylethynyl) series are preserved in solution. Comparison of the saddle distortion of the octa-substituted Ni(II) compound with the ruffled/saddle distortions of the pentakis and hexakis Ni(II) derivs. reveals some influence of asyn. peripheral substitution on geometric structure. These Ni(II) derivs. also exhibit systematic red shifts in their electronic spectra as a function of the number of conjugated alkyne units (~approx.13 nm/alkyne), revealing participation of the eedynine units in the electronic ground and excited states. The solid-state Bergman cyclization temps. of the phenylethynyl compds. vary markedly as a function of planarity, and correlate loosely with alkyne strain separation (N(RA), 4.00 Å, 291°; Np(RA), 3.77 Å, 246°). In solution, both thermal and photochem. activation of the free-base octakis(phenylethynyl) compound lead to formal reduction of the porphyrin backbone via H-atom addition at opposing meso-positions. Generation of a common product suggests that both thermal and photochem. pathways to Bergman cyclization in solution contain significant activation barriers to formation of the 1,4-Ph diradical intermediate, and under these solution conditions, alternate reaction channels are more thermodynamically favorable.

IT 132124-86-3, 2,3,7,8,12,13,17,18-Octabromo-5,10,15,20-tetraphenylporphyrin
 RI: ACT (Reactant) RACT (Reactant or reagent)
 [Preparation of ethynyl-substituted tetraphenylporphyrines and their magnesium and transition metal complexes]
 IN 132124-86-3 CAPLUS
 CN 21K,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)

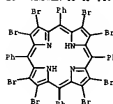
L6 ANSWER 14 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2003:41405 CAPLUS
 DOCUMENT NUMBER: 138:409450
 TITLE: Optical recording media having super resolution mask layer and method for recording/reading thereof
 INVENTOR(S): Sato, Tsutomu; Tomura, Tatsuyasu; Ueno, Tsunobumi; Noguchi, Takashi
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODING: JMOOAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACT. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 200315784	A2	20030530	JP 2001-357662	20011122
PRIORITY APPL. INFO:			JP 2001-357662	20011122

AB The title optical disk has a recording layer on a substrate, wherein a super resolution mask layer contains dispersed porphyrin derivative and is disposed on the recording layer. The optical disk has data storage d. over the diffraction limit of the pick-up lens.

IT 138944-26-6
 RI: TDH (Technical or engineered material use); USES (Uses)
 (super resolution mask layer in optical recording media)
 IN 138944-26-6 CAPLUS
 CN 21K,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)

L6 ANSWER 13 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

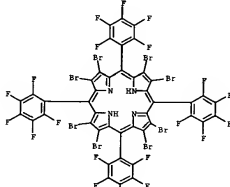


REFERENCE COUNT: 100 THERE ARE 100 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

PAGE 2-A

1

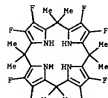


L6 ANSWER 15 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 ACCESSION NUMBER: 2003:385522 CAPLUS
 DOCUMENT NUMBER: 139:100832
 TITLE: Single Side Strapping: A New Approach to Fine Tuning the Anion Recognition Properties of Calix[4]pyrroles
 AUTHOR(S): Lee, Chang-Hyeon; No, Hee-Kyung; Yoon, Dae-Wil; Won, Dong-Moon; Cho, Won-Seob; Lynch, Vincent M.; Shavchuk, Sergey V.; Seidler, Jonathan L.
 CORPORATE SOURCE: Department of Chemistry, Kangwon National University, Chuncheon, 200-701, S. Korea
 SOURCE: Journal of the American Chemical Society (2003), 125(24), 7501-7506
 CODEN: JACSAT ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 139:100832

AB Three calix[4]pyrroles bearing *o*-carinol-derived diether straps of different lengths on one side of the tetrapyrrolic core were synthesized and characterized. Structural information for an analogous diether bridged strapped system reported previously (Yoon, D. W.; Hwang, H.; Lee, C. W. *Angew. Chem., Int. Ed. Engl.* 2002, 41, 1757-1759) is also provided as are bromide and chloride anion affinities for all four systems determined by

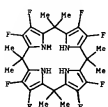
Isothermal Titration Calorimetry (ITC) in acetonitrile. Although both sets of the strapped calix[4]pyrroles displayed enhanced affinities for chloride and bromide anion, differences were seen among the various receptors that support the conclusion that the anion binding ability of calixpyrrole-type systems can be effectively tuned by modifying the length and nature of the bridging straps. In the specific case of the diether systems, the largest chloride affinity was seen with the shortest strap, whereas the largest affinity for bromide anion was recorded in the case of the longest strap. As well as supporting IR NMR spectroscopic studies, it is postulated that not only cavity size per se, but also the ability of the apical portion of the strap to serve as a CH M bond donor site are important in regulating the observed anion affinities.

IT 311804-81-6
 RI: CFC (Chemical process); PEP (Physical, engineering or chemical process); FRP (Properties); PVP (Physical process); RCT (Reactant); PROOC (Process); IMAT (Reactant or reagent)
 (complexation of halide salts; single side strapping approach to fine tuning anion recognition properties of calix[4]pyrroles)
 RN 311804-81-6 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-5,5,10,10,15,15,20,20-octamethyl- (1:1) (SCI) (CA INDEX NAME)



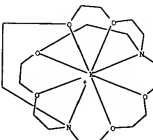
IT 311804-88-3 560094-16-8 560094-21-5

L6 ANSWER 15 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



CH 2

CN 12569-48-1
 CFI C16 H36 K N2 O6 . Cl
 CCI CCS



● Cl⁻

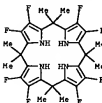
RN 560094-21-5 CAPLUS
 CN 1-Butaneammonium, N,N,N-tributyl-, bromide, compd. with 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-5,5,10,10,15,15,20,20-octamethyl-1-21H,23H-porphine (1:1) (SCI) (CA INDEX NAME)

CH 1

CN 311804-81-6
 CFI C28 H28 F8 N4

L6 ANSWER 15 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 RI: PMU (Formation, nucleation); FRP (Physical, engineering or chemical process); FRP (Properties); PVP (Physical process); FORM (Formation, complexation); PROOC (Process)
 (single side strapping approach to fine tuning anion recognition properties of calix[4]pyrroles)

RN 311804-81-3 CAPLUS
 CN 1-Butaneammonium, N,N,N-tributyl-, chloride, compd. with 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-5,5,10,15,20,20-octamethyl-1-21H,23H-porphine (1:1) (SCI) (CA INDEX NAME)
 CH 1
 CN 311804-81-6
 CFI C28 H28 F8 N4



CH 2

CN 1112-67-0
 CFI C16 H36 N . Cl



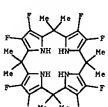
● Cl⁻

RN 560094-16-8 CAPLUS
 CN Potassium(I), (4,7,13,16,21,24-hexaaza-1,10-diazabicyclo[8.8.8]hexacosane-NH),NH10,N10,AC1,AC1,AC13,AC16,AC21,AC24)-, chloride, compd. with 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-5,5,10,10,15,15,20,20-octamethyl-21H,23H-porphine (1:1) (SCI) (CA INDEX NAME)

CH 1

CN 311804-81-6
 CFI C28 H28 F8 N4

L6 ANSWER 15 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



CH 2

CN 1643-19-2
 CFI C16 H36 N . Br



● Br⁻

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

ACCESSION NUMBER: 2003:290712 CAPLUS

DOCUMENT NUMBER: 139:45848

TITLE: Differential substituent effects of β -halogens in water-soluble porphyrins

AUTHOR(S): Riffinger, Justin C.; Sun, Maoran; Nelson, Andrew P.; O'Meara, Stephen G.

CORPORATE SOURCE: Department of Chemistry, University of Nebraska, Lincoln, NE, USA

SOURCE: Organic & Biomolecular Chemistry (2003), 1(4), 733-736

CONTR: OCHCMJ, ISSN: 1477-0520

PUBLISHED: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:45848

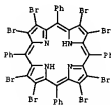
AB The 1st water-soluble β -octafluorinated porphyrins, 5,10,15,20-tetrakis(4-sulfonatophenyl)-2,3,7,8,12,13,17,18-octafluoroporphyrin, 1, and 5,10,15,20-tetrakis(2,6-difluoro-3-sulfonatophenyl)-2,3,7,8,12,13,17,18-octafluoroporphyrin, 2, were prepared and their aqueous aggregation, acid-base, and optical properties were characterized. The porphyrins are tetraanionic at neutral pH (at pH = 3-11 for 1 and pH = 0-9 for 2). Semiempirical (AM1) calculations provide evidence that somewhat unusual acidity characteristics of the fluorinated compounds (with respect to similar brominated porphyrins) can be rationalized solely from chemical hardness and electronegativity arguments. The large conformational differences seen in the structures of brominated and fluorinated water-soluble porphyrins have little impact upon N-H acidity. Metalation of 1 and 2 with ZnCl₂ yielded the corresponding Zn complexes, which were characterized by optical spectroscopy and electrochem.

IT 131214-86-9, 2,3,7,8,12,13,17,18-Octabromo-5,10,15,20-tetraphenylporphyrin 144461-63-6, 2,3,7,8,12,13,17,18-Octabromoporphyrin 541528-61-4

RI: FPD (Properties) (energy of gas phase acidities from semiempirical AM1 calcs.)

RN 11214-85-3 CAPLUS

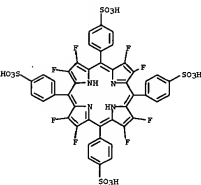
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



RN 144011-83-6 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo- (SCI) (CA INDEX NAME)

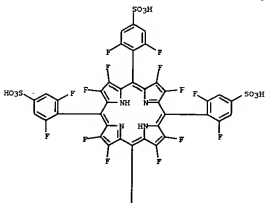
L6 ANSWER 16 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



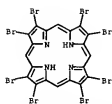
RN 541528-57-8 CAPLUS

CN Benzenesulfonic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octafluoro-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[5,5-difluoro-, tetrasodium salt (SCI) (CA INDEX NAME)

PAGE 1-A

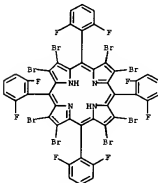


L6 ANSWER 16 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 541528-61-4 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,6-difluorophenyl)- (SCI) (CA INDEX NAME)



IT 541528-56-7P 541528-57-8P

RI: FPD (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

RN 541528-56-7 CAPLUS

CN Benzenesulfonic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octafluoro-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis-, tetrasodium salt (SCI) (CA INDEX NAME)

L6 ANSWER 16 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

PAGE 2-A



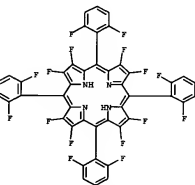
● 4 Na

IT 541528-60-3P

RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

RN 541528-60-3 CAPLUS

CN 21H,23H-Porphine, 5,10,15,20-tetrakis(2,6-difluorophenyl)-2,3,7,8,12,13,17,18-octafluoro- (SCI) (CA INDEX NAME)



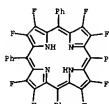
IT 166885-28-9, 2,3,7,8,12,13,17,18-Octafluoro-5,10,15,20-tetraphenylporphyrin

RI: FPD (Properties); RCT (Reactant); RACT (Reactant or reagent)

(reactant for preparation of tetrakis(sulfonatophenyl)octafluoroporphyrin and energy of gas phase acidities from semiempirical AM1 calcs.)

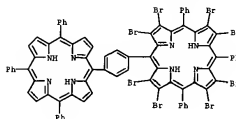
RN 166885-28-9 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



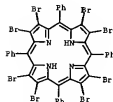
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RECORD

L6 ANSWER 17 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2003/22665 CAPLUS
 DOCUMENT NUMBER: 13512612
 TITLE: Phenylated porphyrins as a sink of excitation energy in porphyrin heterodimers
 AUTHOR(S): Venzani, Mariano; Tagliatesta, Pietro; Pastorini, Alessandro; Mari, Patrizia; Elisei, Fausto; Lattanzi, Loredana; Kadish, Karl M.
 CORPORATE SOURCE: Dipartimento di Scienze e Tecnologia Chimiche, Univ. Roma-Tor Vergata, Roma, 00133, Italy
 JOURNAL OF PORPHYRIN AND PHthalOYANINES (2002), 6(9 & 10), 643-652
 CODING JPCFPRZ ISSN: 1018-0246
 PUBLISHER: Society of Porphyrins & Phthalocyanines
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The photophysics of a new family of free-base and zinc deriva. of meso-tetraphenylporphyrin heterodimers has been studied by UV-vis absorption, fluorescence and nanosecond flash photolysis techniques. An almost complete (w/99) and directionally controlled transfer of excitation energy from a donor porphyrin moiety was obtained by multiple bromination (four and eight Br substituents in the two series of compds. investigated) on the pyrrrole positions of the acceptor porphyrin moi. The covalently linked porphyrin dimers populate almost exclusively low energy triplet states because of the extremely efficient intersystem singlet-to-triplet inter system crossing (ISC) process which is enhanced by the multiple heavy atom substituents. The nature of the electronic interactions determining the actual relaxation pathway followed by the porphyrin donor-acceptor pair is discussed.
 IT 551897-02-2
 RL CFS (Chemical process); FEP (Physical, engineering or chemical process); PFP (Properties); PPOC (Process)
 (perhalogenated porphyrins as sink of excitation energy in porphyrin heterodimers)
 EN 551897-02-2 CAPLUS
 CN 218,238-Porphina, 2,3,7,8,12,13,17,18-octabromo-5,10,15-triphenyl-20-[(4,10,15,20-triphenyl-21H,23H-porphin-5-yl)phenyl] - (SCI) (CA INDEX NAME)



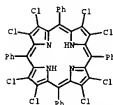
IT 131214-86-3, 21H,23H-Porphina, 2,3,7,8,12,13,17,18-octabromo, 5,10,15,20-tetraphenyl
 RL FEP (Properties)
 (perhalogenated porphyrins as sink of excitation energy in porphyrin heterodimers)
 EN 131214-86-3 CAPLUS

L6 ANSWER 17 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 CN 218,238-Porphina, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)

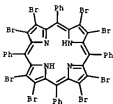


REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RECORD

L6 ANSWER 18 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2003/22665 CAPLUS
 DOCUMENT NUMBER: 131401523
 TITLE: Electronic Absorption and Resonance Raman Signatures of Hyperporphyrins and Nonlinear Porphyrins
 Vassboten, Ingar H.; Conrad, Janne; Ghosh, Abhik
 CORPORATE SOURCE: Institute of Chemistry, Faculty of Science, University of Tromsø, Tromsø, N-9007, Norway
 JOURNAL OF PHYSICAL CHEMISTRY B (2003), 107(v 15), 3611-3623
 CODING JPCFPRZ ISSN: 1520-6106
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB We have carried out a broad survey of tetraphenylporphyrin deriva. in relation to their possible hyperporphyrin character. The majority of the free-base tetraphenylporphyrins studied, i.e., TAPFBD Ar = p-FCOM, where X = CH3, H, F, CF3, and NO2, when dissolved in trifluoroacetic acid (i.e., when centrally diprotonated), exhibit red-shifted "hyperporphyrin" spectra. The "hyper" features are attributable to phenyl-to-porphyrin charge-transfer transitions. However, certain free-base tetraphenylporphyrins with extremely electron-deficient Ph groups, such as TPFPH2, do not exhibit hyperporphyrin behavior in trifluoroacetic acid solution. Certain anionic tetraphenylporphyrin deriva. such as T(p-O-)-PFH2 or Na[T(p-O-)-F] dissolved in methanolic NaOH also qualify as hyperporphyrins. The hyper transitions in these cases involve charge transfer from anionic phenolate substituents to the neutral porphyrin core. This study also presents a first systematic resonance Raman spectroscopic exploration of hyperporphyrins. Comparison of the Soret-resonant Raman spectra of various porphyrins, and hyperporphyrins, with those of the corresponding free-base and hyperporphyrin porphyrin deriva. indicates that the former two categories generally exhibit a more intense ν10 mode, which is the fully sym. square-planar nickel tetraarylporphyrins. We have also re-investigated recent reports of large red shifts observed for the electronic spectra of addled porphyrins in polar solvents, an effect attributed to increased H-bond-solvent hydrogen bonding in polar solvents. Interestingly, we find that such solvent-induced red shifts are observed for the relatively electron-deficient porphyrin BTPFPH2, ClTPFPH2, and OETPFH2 but not for the relatively electron-rich OETPFH2. Resonance Raman spectra of these addled porphyrins in different solvents reveal little change in the high-frequency marker bands, which is consistent with little change in the macrocyclic conformation with solvent polarity. The observed solvent-induced red shifts in the electronic spectra therefore appear to reflect a largely electronic (as opposed to conformational) effect of H-bond-solvent hydrogen bonding in polar solvents. Finally, we also present a chronol. summary of the controversial question as to whether conformational deformations are actually responsible for the red-shifted electronic spectra of the majority of nonlinear porphyrins.
 IT 120648-25-9, p-Octabromo-meso-tetraphenylporphyrin
 131214-86-3, p-Octabromo-meso-tetraphenylporphyrin
 RL FEP (Physical, engineering or chemical process); PFP (Physical process); PPOC (Process)
 (electronic absorption and resonance Raman signatures of hyperporphyrins and nonlinear porphyrins)
 EN 120648-25-9 CAPLUS
 CN 218,238-Porphina, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



RN 131214-86-3 CAPLUS
 CN 21W,23W-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

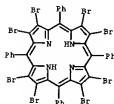
ACCESSION NUMBER: 2003107716 CAPLUS
 DOCUMENT NUMBER: 138134795D
 TITLE: Unusual Aryl-Porphyrin Rotational Barriers in
 Peripherally Crowded Porphyrins
 AUTHOR(S): Medforth, Craig J.; Haddad, R.; Muzel, Claudia M.;
 Donley, Neal R.; Siquero, Laurence; Byr, David C.;
 Wurco, Daniel J.; Olmstead, Marilyn M.; Smith, Kevin
 M.; Ma, Jian-Qiao; Shalunov, Juba A.
 CORPORATE SOURCE: Department of Chemistry, University of California,
 Davis, CA, 95616, USA
 SOURCE: Inorganic Chemistry (2003), 42(7), 2227-2241
 CODEN: INOCAL; ISSN: 0022-1669
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 138134795D

AB Previous studies of 5,10,15,20-tetraphenylporphyrin showed that the barrier
 for meso aryl-porphyrin rotation (40,000J/mol) varies as a
 function of the core substituent M and is lower for a small metal (M = Ni)
 compared to a large metal (M = Zn) and for a dication (M = Hg²⁺) vs. a
 free base porphyrin (M = 2H). This was attributed to changes in the
 nonplanar distortion of the porphyrin ring and the deformability of the
 macrocycle caused by the core substituent. X-ray crystallog., mol.
 mechanics (MM) calcul., and variable temperature (VT) ¹H NMR spectroscopy

were used to examine the relation between the aryl-porphyrin rotational barrier
 and the core substituent M in some novel 2,3,5,6,7,8,10,12,13,15,17,18,20-
 dodecaphenylporphyrin (DkPps), and specifically in some
 5,10,15,20-tetraaryl-2,3,7,8,12,13,17,18-octaphenylporphyrins (TAOPPs),
 where steric crowding of the peripheral groups always results in a very
 nonplanar macrocycle. X-ray structures of DkPps indicate differences in
 the nonplanar conformation of the macrocycle as a function of M, with
 saddle conformations being observed for M = Zn, 2H or M = Hg²⁺ and saddle
 and/or ruffle conformations for M = Ni. Variable-temperature NMR studies

show that the effect of protonation in the TAOPPs is to increase
 the 40,000J/mol barrier, which is the opposite of the effect seen for the
 TAOPPs, and MM calcul. also predict a strikingly high barrier for the
 TAOPPs when M = Hg²⁺. These and other findings suggest that the
 aryl-porphyrin rotational barriers in the DkPps are closely linked to the
 deformability of the macrocycle along a nonplanar distortion mode which
 moves the substituents being rotated out of the porphyrin plane.

IT 131214-86-3
 RI: RCT (Reactant); RACT (Reactant or reagent)
 RN 131214-86-3 CAPLUS
 CN 21W,23W-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (9CI) (CA INDEX NAME)

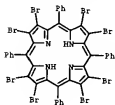


REFERENCE COUNT: 110 THERE ARE 110 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2003104009 CAPLUS
 DOCUMENT NUMBER: 138134615D
 TITLE: Effect of a proton-donating solvent on complexation of
 classical and nonclassical porphyrin in a pyridine
 medium
 AUTHOR(S): Hareizi, D. B.; Toldina, O. V.
 CORPORATE SOURCE: Russia
 SOURCE: Chemical Neorganiicheskoj Khimii (2002), 47(12),
 2075-2081
 CODEN: CHNOGJ; ISSN: 0044-457X
 PUBLISHER: Nauka/Interperiodica Publishing
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian

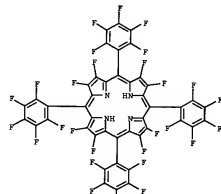
AB The inhibiting effect of proton-donating additive (HAc) on the rate of
 coordination of tetrabenzoporphyrin (I) and tetraphenyltetraabenzoporphyrin(II)
 as well as of N-substituted porphyrins (III and IV) with CuAc₂ and
 ZnOAc₂ in pyridine medium is shown. It is also shown that in the compe.
 I and II, the properties of the Ni bond and the reactivity for a given
 reaction are close to those for nonclassical porphyrins (NCP). The
 N-substituted porphyrins III et IV do not behave the same way. The
 inhibition of the coordination reaction in the compound III and IV can be
 explained by the increase of basicity of the tertiary nitrogen atoms in
 these mole.

IT 131214-86-3
 RI: RCT (Reactant); RACT (Reactant or reagent)
 RN 131214-86-3 CAPLUS
 CN 21W,23W-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (9CI) (CA INDEX NAME)



L6 ANSWER 21 of 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:69802 CAPLUS
 DOCUMENT NUMBER: 138:401522
 TITLE: Perfluorinated meso-aryl-substituted expanded porphyrins
 AUTHOR(S): Shinomi, Soji; Shin, Ji-Young; Furuta, Hirokazu; Ismail, Rami; Osuka, Atsuhiko
 CORPORATE SOURCE: Department of Chemistry Graduate School of Science, Kyoto University, Kyoto, 606-8502, Japan
 SOURCE: Asawaadate Chemie, International edition (2003), 42(1), 78-82
 CODEN: ACIEF5; ISSN: 1433-7881
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 138:401522
 AB The title porphyrin were prepared by condensation of perfluorophenol and 3,4-difluoropyrrole and characterized as to structure and conformation by spectral and X-ray crystallographic means.
 IT 121399-88-OP, ring expanded analogs 121399-88-OP
 RI: FRP (Properties); SWP (Synthetic preparation); PREP (Preparation) (Preparation; conformation and crystal structure of perfluorinated meso-aryl-substituted expanded porphyrins)
 CN 121399-88-5 CAPLUS
 CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

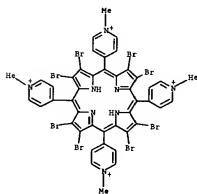
PAGE 1-A



PAGE 2-A

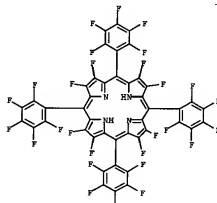
↓

L6 ANSWER 22 of 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:60387 CAPLUS
 DOCUMENT NUMBER: 138:276888
 TITLE: Kinetics of the reactions of divalent copper, zinc, cobalt, and nickel with a deformed water soluble centrally monoprotoporphyrin
 AUTHOR(S): Bailey, Sabrina L.; Hambright, Peter
 CORPORATE SOURCE: Department of Chemistry, Howard University, Washington, DC, 20059, USA
 SOURCE: Inorganica Chimica Acta (2003), 344, 43-48
 CODEN: ICHIMA; ISSN: 0020-1693
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The kinetics of incorporation of Cu²⁺, Zn²⁺, Co²⁺, and Ni²⁺ into the free base H2-Bp(4) and centrally monoprotoporphyrin H-Bp(4) (3) forms of the deformed and water soluble beta-octabromo-tetrakis(N-methyl-4-pyridyl)porphyrin were studied at 25 °C, I=0.10 (NaNO3/NaOH). Below pH 7, the reactions were first-order in porphyrin and metal, and the rate constants increased with an increase in pH. The monocation H2-Bp(4) (5) did not incorporate metal ions, and H-Bp(4) (3) reacted several hundred times faster than H2-Bp(4) (4). The incorporation rate constants for the pre-deformed tetrakis(N-methyl-4-pyridyl)porphyrin. For both porphyrins, the reactivity order was Cu²⁺>Ni²⁺>Co²⁺>Zn²⁺. While Cu²⁺ reacted approx. 104 times more rapidly than did Ni²⁺, the ratios of the metalation rate constants of H-Bp(4) (3) to the water exchange rate constants of the metal ions varied by no more than a factor of 4 across the series.
 IT 174580-25-7 CAPLUS
 RI: CFS (Chemical process); FRP (Physical, engineering or chemical process); FRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
 CN 174580-25-7 CAPLUS
 CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[1-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 21 of 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 121399-88-0 CAPLUS
 CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

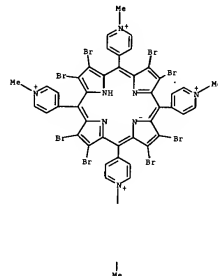


PAGE 2-A

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RECORD

L6 ANSWER 22 of 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 503770-97-1 CAPLUS
 CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[1-methyl-, monocation salt) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RECORD

L6 ANSWER 23 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 2002:900495 CAPLUS

DOCUMENT NUMBER: 138:304092

TITLE: Photoinitiated olefin epoxidation with molecular oxygen, sensitized by free base porphyrins and promoted by hexacarbonylnickelium in homogeneous solution

AUTHOR(S): Capozzanti, Sandro; Tonello, Umberto
CORPORATE SOURCE: Università di Padova, Dipartimento di Chimica Organica, Centro CNR di Studio sui Meccanismi di Reazioni Organiche, Padova, 36121, Italy
SOURCE: European Journal of Organic Chemistry (2002), (22), 3827-3832

CODEN: EJOCFK ISSN: 1434-193X

WILEY-VCH Verlag GmbH & Co. KGaA

PUBLISHER: Journal

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:304092

AB The photooxidation of various olefins in homogeneous solution under an oxygen atmosphere by use of visible light, a dye sensitizer, and an oxygen-transfer catalyst, has been investigated. The oxygen transfer from mol. oxygen to olefin involves the following steps: (i) photoinduced singlet-oxygen formation, (ii) allyl hydroperoxide formation through the ene reaction, (iii) the intermolecular of a reactive molybdenum peroxide, and (iv) olefin epoxidation. Of the remaining substrate or of a second olefin. Among the various sensitizers and catalysts tested, the electron-deficient free base porphyrin 5,10,15,20-tetrakis(2,6'-dichlorophenyl)- β -octabromoporphyrin and hexacarbonylnickelium showed the best performance in terms of robustness and activity. Under suitable conditions, complete olefin conversion can be obtained by adoption of molar ratios of sensitizer/catalyst/substrate of 1:50:2000, with the formation of the corresponding epoxide in up to 38% yield, which corresponds to 7% of the theor. maximum. Quite interestingly, olefin reluctant to undergo ene reactions may be epoxidized in the presence of a second sacrificial olefin, yielding the corresponding epoxide with up to 80% total selectivity.

IT 107085-95-0

RI: 807 (Reagent); RACT (Reactant or reagent)

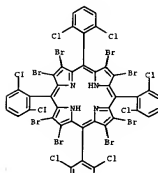
(photoinduced olefin epoxidation, with mol. oxygen sensitized by free base porphyrins and promoted by hexacarbonylnickelium)

EN 107085-95-0 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,6-dichlorophenyl)- (9CI) (CA INDEX NAME)

L6 ANSWER 23 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN

(Continued)



REFERENCE COUNT:

34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 24 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 2002:108700 CAPLUS

DOCUMENT NUMBER: 138:73108

TITLE: On the role of β -fluorine substitution on the extent of core deformation of porphyrin dications

AUTHOR(S): Forthel, Emmanuel; Toupet, Loïc; Leroy, Jacques; Boudon, Arnaud
CORPORATE SOURCE: Laboratoire de Chimie Organometallique et Biologique, Université de Rennes 1, UMR CNRS 6505, Rennes, F-35042, Fr.

SOURCE: Tetrahedron Letters (2002), 43(46), 8293-8296

CODEN: TETLEA ISSN: 0040-4039

WILEY-VCH Verlag GmbH & Co. KGaA

PUBLISHER: Journal

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Careful anal. of fully and partially β -fluorinated dicationic porphyrins have been performed suggesting an electronic influence of the β -fluorine atoms on the extent of the macrocycle deformation, in agreement with the crystal structure of β -octafluoro-meso-tetraphenylporphyrin dication.

IT 479637-13-0

RI: PMP (Preparation, unclassified); PMP (Properties); PMP (Preparation) (crystal structure; role of β -fluorine substitution on the extent of core deformation of porphyrin dications)

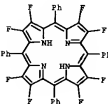
EN 479637-13-0 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraphenyl-, diperchlorate, compd. with dichloromethane (1:2), dihydrate (9CI) (CA INDEX NAME)

CN 1

CRN 186885-28-9

CMF C44 H22 F8 N4



CN 2

CRN 7601-90-3

CMF C1 H 04



L6 ANSWER 24 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN

(Continued)

CN 3

CRN 75-09-2

CMF C H2 Cl2

Cl-Cl

IT 479637-13-0 479637-15-5

RI: PMP (Preparation)

(role of β -fluorine substitution on the extent of core deformation of porphyrin dications)

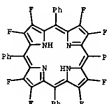
EN 479637-13-0 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraphenyl-, diperchlorate (9CI) (CA INDEX NAME)

CN 1

CRN 186885-28-9

CMF C44 H22 F8 N4



CN 2

CRN 7601-90-3

CMF C1 H 04



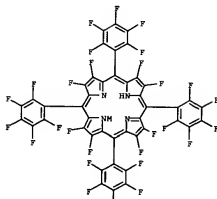
EN 479637-13-0 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)-, diperchlorate (9CI) (CA INDEX NAME)

CN 1

CRN 121399-88-0

CMF C44 H22 F26 N4

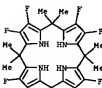


CH 2
CHN 7601-90-3
CHT Cl H O4



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 25 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
ACCESSION NUMBER: 2002751572 CAPLUS
DOCUMENT NUMBER: 137389723
TITLE: Theoretical Study of Anion Binding to Calix[4]pyrrole: the Effects of Solvent, Fluorine Substitution, Coniugate, and Water Traces
AUTHOR(S): Blas, J.; Ramon Marques, Manuel; Sessler, Jonathan L.; Lora, J.; Javier Orozco, Modesto
CORPORATE SOURCE: Departament de Química i Biologia Molecular, Facultat de Química, Universitat de Barcelona, Barcelona, 08028, Spain
SOURCE: Journal of the American Chemical Society (2002), 124(43), 12796-12805
CODEN: JACSAT; ISSN: 0002-7663
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The binding of different anions to calix[4]pyrrole has been studied by means of mol. dynamics coupled to thermodyn. integration calcs. The effect of different apolar solvents, octafluoro substitution, and the change in binding free energy derived from the presence of coniugate and water traces (the hydrated salt used to introduce the anion in the solution) was examined. Calcs. allow us to rationalize the differential binding of ions to calix[4]pyrrole and octafluorocalix[4]pyrrole as well as to predict the behavior in new solvents for which expnl. data are not available yet. It is found that both calix[4]pyrrole and octafluorocalix[4]pyrrole have a dramatic preference for F- in the gas phase and pure aprotic solvents, but the situation can change dramatically in protic solvents or in the presence of the hydrated cation which is used as coniugate of the anion. Overall, our results provide interesting clues for a better understanding of the process detected expit. as "binding".

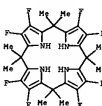


● Cl⁻

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 25 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
ACCESSION NUMBER: 2002751572 CAPLUS
DOCUMENT NUMBER: 137389723
TITLE: Theoretical Study of Anion Binding to Calix[4]pyrrole: the Effects of Solvent, Fluorine Substitution, Coniugate, and Water Traces
AUTHOR(S): Blas, J.; Ramon Marques, Manuel; Sessler, Jonathan L.; Lora, J.; Javier Orozco, Modesto
CORPORATE SOURCE: Departament de Química i Biologia Molecular, Facultat de Química, Universitat de Barcelona, Barcelona, 08028, Spain
SOURCE: Journal of the American Chemical Society (2002), 124(43), 12796-12805
CODEN: JACSAT; ISSN: 0002-7663
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The binding of different anions to calix[4]pyrrole has been studied by means of mol. dynamics coupled to thermodyn. integration calcs. The effect of different apolar solvents, octafluoro substitution, and the change in binding free energy derived from the presence of coniugate and water traces (the hydrated salt used to introduce the anion in the solution) was examined. Calcs. allow us to rationalize the differential binding of ions to calix[4]pyrrole and octafluorocalix[4]pyrrole as well as to predict the behavior in new solvents for which expnl. data are not available yet. It is found that both calix[4]pyrrole and octafluorocalix[4]pyrrole have a dramatic preference for F- in the gas phase and pure aprotic solvents, but the situation can change dramatically in protic solvents or in the presence of the hydrated cation which is used as coniugate of the anion. Overall, our results provide interesting clues for a better understanding of the process detected expit. as "binding".

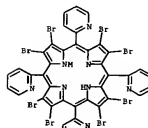
IT 311804-81-6
RL PFP (Physical, engineering or chemical process) PFP (Properties); PFP (Physical process) PFC (Process)
JN 311804-81-6 CAPLUS
CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-5,10,15,15,20,20-octamethyl- (9CI) (CA INDEX NAME)



IT 475644-56-5
RL PFM (Formation, unclassified); PFP (Properties); FOM (Formation, noncooperative)
JN 475644-56-5 CAPLUS
CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-5,10,15,15,20,20-octamethyl- (9CI) (CA INDEX NAME)

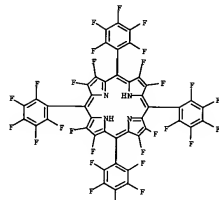
L6 ANSWER 26 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
ACCESSION NUMBER: 2002749114 CAPLUS
DOCUMENT NUMBER: 13846962
TITLE: Perhalogenated 2-pyridylporphyrin complexes: synthesis, self-coordinating aggregation properties, and catalytic studies
AUTHOR(S): Rebouças, Julio S.; De Carvalho, Maria Eliza M. D.; Idemori, Yusra M.
CORPORATE SOURCE: Departamento de Química - ICEx - Universidade Federal de Minas Gerais, Belo Horizonte, 31270-901, Brazil
SOURCE: Journal of Porphyrins and Phthalocyanines (2002), 6(1), 56-57
CODEN: JPPHFF; ISSN: 1088-4246
PUBLISHER: Society of Porphyrins & Phthalocyanines
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 13846962
AB The synthesis of 2,3,7,8,12,13,17,18-octabromo-meso-tetrakis(2-pyridyl)porphyrin, MbR2TP2Py, is described, including the comparison of four attempted methods for the demetalation of ZnP2TP2Py. One of the methods represents a strategy of demetalation based on the acid-base properties of the macrocycle, the solvent-dependent kinetics of metal insertion into porphyrins and the pH-dependent solubility of the 2-pyridylporphyrin derivs. in water. Self-coordinating aggregation of ZnP2TP2Py in non-coordinating solvents was observed by IR and spectroscopy. The Mn(II)/Mn(II) redox potential for MbR2TP2Py is 0.38 V higher than the reduction potential measured for its 1st-generation analog.
RLT2PyCl. Cyclohexane hydrocyclopoly by iodonolbenzene was performed in CHCl3 catalyzed by MbR2TP2Py and MbR2TP2Py. MbR2TP2Py was highly active, even at low concentration (5 × 10⁻⁵ M), but perhalogenation did not account for oxidative robustness. At a low catalyst concentration, MbR2TP2Py exhibited no activity as inferred by comparison to blank expts.

IT 473863-47-2
RL: RACT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
JN 473863-47-2 CAPLUS
CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetra-pyridyl- (9CI) (CA INDEX NAME)



L6 ANSWER 27 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2002-725874 CAPLUS
 DOCUMENT NUMBER: 138:49060
 TITLE: Synthesis of F28 tetraphenylporphyrin and its application to the separation and detection of lithium (I)
 AUTHOR(S): Koyanagi, Kenji; Tabata, Masaki
 CORPORATE SOURCE: Department of Chemistry, Faculty of Science and Engineering, Saga University, 1-Honjo-machi, Saga-shi, Saga, 840-8502, Japan
 SOURCE: Bunseki Kagaku (2002), 51(8), 403-407
 CODEN: BNSKAK ISSN: 0525-1931
 PUBLISHER: Nippon Bunseki Kagaku Kai
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 AB: 2,3,7,8,12,13,17,18-Octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin (F28 tetraphenylporphyrin; OPTFFF) was synthesized by the condensation of 3,4-difluoropyrrole and pentafluorobenzaldehyde. 3,4-Difluoropyrrole was prepared from 2,2,3,3-tetrafluoromucic acid as the starting material through 5-step reaction processes. The acid-dissociation consts. of OPTFFF were determined by a solvent-extraction method in the presence of tetrabutylammonium chloride (0.1 mol dm⁻³). The 28 fluorine atoms decreased the basicity of the porphyrin and made two protons of imidecarboxylate release at pH 4 and 7 ([HOP]) + Na⁺·dihaw. ([HOP-]) + Na⁺·pKa 4.2 ([HOP-] + Na⁺·dihaw. ([HOP-]) + Na⁺·pKa 8.0). The protons of the tetraphenylporphyrin substituted by fluorine atom did not dissociate at a pH lower than 14. OPTFFF reacted with lithium ion in the neutral pH range, and gave a new absorption spectrum with a maximum wavelength of 416 nm in chloroform.
 IT 121399-48-0F
 RI: SPN (Synthetic preparation) PREP (Preparation)
 (synthesis of F28 tetraphenylporphyrin and separation and detection of lithium)
 RN 121399-48-0 CAPLUS
 CN 238,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)

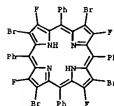
PAGE 1-A



1
F

PAGE 2-A

L6 ANSWER 28 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2002-641275 CAPLUS
 DOCUMENT NUMBER: 137:375220
 TITLE: Synthesis and characterization of partially P-fluorinated 5,10,15,20-tetraphenylporphyrins and some derivatives
 AUTHOR(S): Leroy, Jacques; Portelle, Emmanuel; Bondon, Arnaud
 CORPORATE SOURCE: UMR CNRS 8640, Département de Chimie, Ecole Normale Supérieure, Paris, 75231, Fr.
 SOURCE: Tetrahedron (2002), 58(33), 6713-6722
 CODEN: TETRAH 1506: 0040-4020
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 137:375220
 AB: The synthesis of partially P-fluorinated meso-tetraphenylporphyrins using Lindsey conditions, was examined, starting either from 3,4-difluoro-1H-pyrrole or from 3-fluoro-1H-pyrrole. In the case of the 3,4-difluoro-1H-pyrrole, condensation with pyrrole and benzaldehyde afforded a mixture of porphyrins of general formula P-PtFP (n = 0,2,4,6,8) displaying linearly correlated spectroscopic and electrochem. properties. With the 2nd synthon, condensation with benzaldehyde produced an unresolvable mixture of P-tetraphenylporphyrins presenting spectroscopic and electrochem. properties in coherence with those observed in the 1st case. Preliminarily, the synthesis and isolation of the hitherto unknown 3-fluoro-1H-pyrrole was approached via several methods. Preparation of zinc complexes of the fluorinated porphyrins is reported.
 IT 475541-14-7F
 RI: PREP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation of partially P-fluorinated porphyrins and their zinc complexes)
 RN 475541-14-7 CAPLUS
 CN 218,218-Porphine, 2,7,12,17-tetrabromo-3,8,13,18-tetrafluoro-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



L6 ANSWER 29 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2002:639268 CAPLUS
 DOCUMENT NUMBER: 137:185360
 TITLE: Preparation, binding properties, and uses of halogenated calixpyrroles, calixpyridinopyrroles and calixpyridines.
 INVENTOR(S): Seidler, Jonathan L.; Marquez, Manuel; Amzenbacher, Pavel; Shriver, James A.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 104 pp., Cont.-in-part of U.S. Ser. No. 678,998.
 COORD: US0000
 PATENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

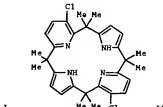
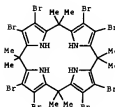
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002115566	A1	20020822	US 2001-939514	20010824
CA 2361030	AA	19971016	CA 1997-2391030	19970404
US 20022157	B1	20010717	US 1997-833798	19970404
US 200226047	A1	20020228	US 2001-838998	20010420
WO 2003018548	A2	20030306	WO 2002-0927252	20020826
WO 2003018548	A3	20030703		

V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BS, CA, CH, CN, CO, CU, CZ, DE, DK, DM, DO, EC, EE, ES, FI, GB, GR, GU, HK, HU, IL, IN, JP, KE, KG, KP, KR, KZ, LC, LG, LR, LS, LT, LU, LV, MA, MD, MG, MH, MK, MN, MU, MW, MX, MY, NZ, OM, PA, PE, PG, PH, PK, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW
 PFI: GH, GM, KE, LS, MW, MZ, SD, SI, ST, SZ, TG, UG, ZW, AM, AZ, BY, EC, EG, HU, IL, IN, JP, KE, KG, KP, KR, KZ, LC, LG, LR, LS, LT, LU, LV, MA, MD, MG, MH, MK, MN, MU, MW, MX, MY, NZ, OM, PA, PE, PG, PH, PK, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW
 COUNTRY CODES: CA, CN, GB, GR, IL, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CD, CI, CH, GA, GM, GQ, GW, ML, MR, NE, NG, NI, TD, TG

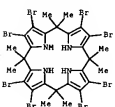
PRIORITY APPL. INFO:

OTHER SOURCE(S):
 GI

MARPAT 137:185360



L6 ANSWER 25 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



L6 ANSWER 29 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

AB Halogenated calixpyrrole, calixpyridinopyrrole, and calixpyridine macrocycles, such as octabromo-meso-octastethylcalix[4]pyrrole (I) and calixpyridinopyrrole II, having 4-12 pyrrole rings with greater stability were prepared for uses such as dialysis, ion exchange, and environmental remediation. Thus, I was prepared in 90% yield by bromination of the corresponding meso-octastethylcalix[4]pyrrole using N-bromosuccinimide in THF. Enhanced anion, neutral mol. binding affinity and different binding selectivities as compared to their nonhalogenated counterparts as judged from 1H NMR, 13F NMR and fluorescence emission spectroscopic analyses.

IT 31184-81-6 CAPLUS

RU: NWU (Other use, unclassified); PEP (Physical, engineering or chemical process); PFP (Physical process); SPS (Synthetic preparation); THU (Therapeutic use); BLO (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(Preparation and anion binding properties of calixpyrroles, calixpyridinopyrroles and calixpyridines for use environmental remediation, kidney dialysis and cation-exchangers)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

RU 31184-81-6 CAPLUS

CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)

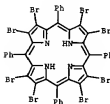
RU 31184-81-6 CAPLUS

L6 ANSWER 30 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

IT 465336-70-2P 465336-80-2P 465336-81-6P
465336-84-9P 465336-87-2P 465336-90-7P
465336-91-8P 465336-92-9P 465336-93-0P
465336-95-2P 465336-96-3P 465336-97-4P
465336-98-1P 465336-99-6P 465337-00-2P
465337-01-3P
Rli CFS (Chemical process); PEP (Physical, engineering or chemical process); PEP (Properties); SPN (Synthetic preparation); PSEP (Preparation); PPOC (Process)
[preparation of, formation const. for; Lewis-base binding properties of free-base *N*-octabromotetraphenylporphyrin (Bristau)]

RN 465336-78-1 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with quinoline (1:1) (SCI) (CA INDEX NAME)

CM 1
CRN 131214-86-3
CMF C44 H22 Br8 N4



CM 2
CRN 91-22-5
CMF C3 H7 N



RN 465336-80-5 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with pyridine (1:1) (SCI) (CA INDEX NAME)

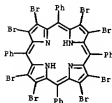
CM 1
CRN 131214-86-3
CMF C44 H22 Br8 N4

L6 ANSWER 30 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 465336-84-9 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with 1-methyl-1H-imidazole (1:1) (SCI) (CA INDEX NAME)

CM 1
CRN 131214-86-3
CMF C44 H22 Br8 N4



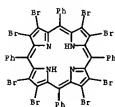
CM 2
CRN 616-47-7
CMF C4 H6 N2



RN 465336-87-2 CAPLUS
CN 4-Pyridylamino, N,N-dimethyl-, compd. with 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-21H,23H-porphine (1:1) (SCI) (CA INDEX NAME)

CM 1
CRN 131214-86-3
CMF C44 H22 Br8 N4

L6 ANSWER 30 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

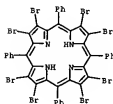


CM 2
CRN 110-86-1
CMF C5 H5 N



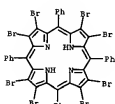
RN 465336-81-6 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with 3-methylpyridine (1:1) (SCI) (CA INDEX NAME)

CM 1
CRN 131214-86-3
CMF C44 H22 Br8 N4



CM 2
CRN 108-99-6
CMF C6 H7 N

L6 ANSWER 30 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

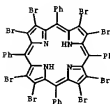


CM 2
CRN 1122-58-3
CMF C7 H10 N2



RN 465336-90-7 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with piperidine (1:1) (SCI) (CA INDEX NAME)

CM 1
CRN 131214-86-3
CMF C44 H22 Br8 N4



CM 2
CRN 110-89-4
CMF C5 H11 N

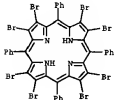


RN 465536-91-8 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-,
compd. with 1,4-dioxane (1:1) (SCI) (CA INDEX NAME)

CH 1

CRN 131214-86-3

CHF C44 H22 Br8 N4



CH 2

CRN 123-91-1

CHF C4 H8 O2



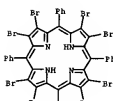
RN 465536-92-9 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-,
compd. with sulfinylbis(methane) (1:1) (SCI) (CA INDEX NAME)

CH 1

CRN 131214-86-3

CHF C44 H22 Br8 N4



CH 2

CRN 67-68-5

CHF C2 H6 O 5



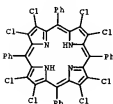
RN 465536-93-0 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-,
compd. with quinoline (1:1) (SCI) (CA INDEX NAME)

CH 1

CRN 120644-25-9

CHF C44 H22 Cl8 N4



CH 2

CRN 91-22-5

CHF C8 H7 N



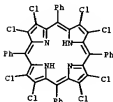
RN 465536-95-2 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-,
compd. with pyridine (1:1) (SCI) (CA INDEX NAME)

CH 1

CRN 120644-25-9

CHF C44 H22 Cl8 N4



CH 2

CRN 110-86-1

CHF C8 H5 N



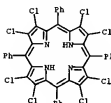
RN 465536-96-3 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-,
compd. with 3-methylpyridine (1:1) (SCI) (CA INDEX NAME)

CH 1

CRN 120644-25-9

CHF C44 H22 Cl8 N4



CH 2

CRN 108-99-6

CHF C8 H7 N



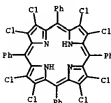
RN 465536-97-4 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-,
compd. with 1-methyl-1H-imidazole (1:1) (SCI) (CA INDEX NAME)

CH 1

CRN 120644-25-9

CHF C44 H22 Cl8 N4



CH 2

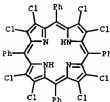
CRN 616-47-7

CHF C4 H6 N2



RN 465536-58-5 CAPLUS
CN 4-pyridinamine, N,N-dimethyl-, compd. with 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-21H,23H-porphine (1:1) (9C1) (CA INDEX NAME)

CH 1
CEN 120644-25-9
CHF C44 H22 C16 N4



CH 2
CEN 1322-58-3
CHF C7 H10 N2

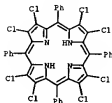


RN 465536-59-6 CAPLUS
CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with piperidine (1:1) (9C1) (CA INDEX NAME)

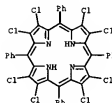
CH 1
CEN 120644-25-9
CHF C44 H22 C16 N4

RN 465537-01-3 CAPLUS
CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with sulfinylbis[ethane] (1:1) (9C1) (CA INDEX NAME)

CH 1
CEN 120644-25-9
CHF C44 H22 C16 N4



CH 2
CEN 67-68-5
CHF C2 H5 O S

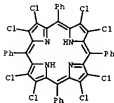


CH 2
CEN 110-89-4
CHF C5 H11 N



RN 465537-00-2 CAPLUS
CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with 1,4-dioxane (1:1) (9C1) (CA INDEX NAME)

CH 1
CEN 120644-25-9
CHF C44 H22 C16 N4



CH 2
CEN 123-91-1
CHF C4 H8 O2

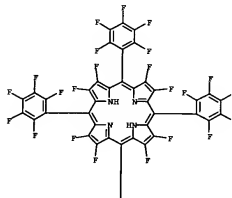


ACCESSION NUMBER: 2002-606697 CAPLUS
DOCUMENT NUMBER: 137:352662
TITLE: Theoretical studies on the structural change of the N-protonated tetraphenylporphyrin. (II) - effects of the substituting fluorine groups
AUTHOR(S): Huang, Xiao-Peng Ma, Si-Yu Liu, Rao-Zhuang
CORPORATE SOURCE: Department of Chemistry, Beijing Normal University, Beijing, 100875, Pesp. Rep. China
SOURCE: GaoJian XueXiao HuanXue XueBao (2002), 23(8), 1562-1566
CODEN: XHEDDH ISSN: 0251-0790
PUBLISHER: Journal
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB With the symmetry being reasonably restricted, the semi-empirical method of AM1 MO is used to calculate the geometries of 5,10,15,20-tetrakis(pentafluorophenyl)porphyrin (TPSPH2) and 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin (F28TPPH2) and their N-protonated diacids (TPSPH2+4 and F28TPPH2+4) which all are kinds of important porphyrin derivs. Also, the configurational change in protonation process and the probable influence to mol. aggregation conducted by the change are discussed by the means of structure anal., population anal. and frontier orbital anal.

IT 474482-97-2
RI: PH2 (Formation, unclassified); FPP (Properties); FPPN (Formation, nonpreparative)
(Chem. studies on fluorine substituent effects on structural changes by N-protonation of tetraphenylporphyrin)

RN 474482-97-2 CAPLUS
CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)-, conjugate diacid (9C1) (CA INDEX NAME)

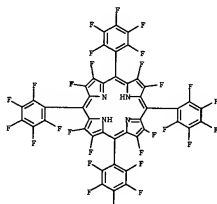


PAGE 2-A

● 2 H⁺

II 121399-88-0

RI: PFP (Properties); RCT (Reactant); RACT (Reactant or reagent)
 (User: studies on fluorine substituent effects on structural changes
 by hydrogenation of tetraphenylporphyrin)
 RN 121399-88-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-
 tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)



PAGE 1-A

I

PAGE 2-A

ACCESSION NUMBER: 2002124523 CAPLUS

DOCUMENT NUMBER: 1391220923

TITLE: Unusual solvent dependent optical absorption spectral
 properties of free base perhaloporphyrins. [Erratum to
 document cited in CA135:263667]
 Blyrappa, P.; Bhavana, P.

AUTHOR(S):
 CORPORATE SOURCE: Department of Chemistry, Indian Institute of
 Technology, Madras, Chennai, 600 036, India
 Chemical Physics Letters (2002), 360(5,6), 592

SOURCE: CODING: CODING: 1250: 0009-2614
 ELSEVIER SCIENCE B.V.
 JOURNAL

PUBLISHER:

DOCUMENT TYPE:

LANGUAGE:

English

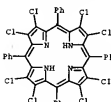
AB In Table 3, last data line, H20HTP should be H2TTP. On page 63,
 paragraph 4, line 2, 10-70 should be 10-70; on line 3, 0.1 should be -0.10.

IT 120644-28-9, 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-
 5,10,15,20-tetraphenyl- 12245-86-3, 2,3,7,8,12,13,17,18-
 Octabromo-5,10,15,20-tetraphenylporphyrin

RI: PFP (Properties)
 (unusual solvent dependent optical absorption spectral properties of
 free-base perhaloporphyrins [Erratum])

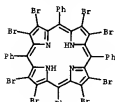
RN 120644-28-9 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-
 (SCI) (CA INDEX NAME)



RN 131214-86-3 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (SCI) (CA INDEX NAME)



I

PAGE 2-A

ACCESSION NUMBER: 2002124652 CAPLUS

DOCUMENT NUMBER: 1391555101

TITLE: Catalytic Oxidations of Stereod Substrates by
 Artificial Cytochrome P-450 Enzymes

AUTHOR(S): Yano, Yerry Gabriel; Bartolomeo Belvedere, Sandro;
 Huang, Yihong; Breslow, Ronald

CORPORATE SOURCE: Department of Chemistry, Columbia University, New
 York, NY, 10027, USA

SOURCE: Journal of Organic Chemistry (2002), 67(15), 5057-5067
 CODING: CODING: 1250: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB CASREACT 137:155101

Catalysts comprising manganese-porphyrins carrying cyclodextrin binding
 groups are able to perform hydroxylations with substrate selectivity and
 regio- and stereoselectivity and high catalytic turnover. The geometries of
 the catalyst/substrate complexes override intrinsic substrate
 reactivities, permitting attack on geometrically accessible saturated
 carbons

of steroids in the presence of secondary carbonyl groups and carbon-carbon
 double bonds, as in enzymic reactions. Selective hydroxylations of
 steroid carbon 9 positions are of particular practical interest.

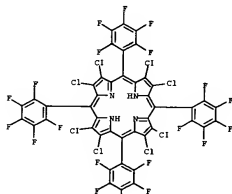
IT 161405-60-3, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-Tetrakis(a-
 methoxy-2,3,5,6-tetrafluorophenyl)porphyrin

RI: RCT (Reactant); SPM (Synthetic preparations); PFP (Preparation); RACT
 (Reactant or reagent)

(regio- and stereoselective catalytic oxides, of steroids by catalysts
 comprising manganese-porphyrins bound to cyclodextrins)

RN 161405-60-3 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-
 tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)



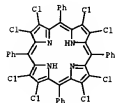
PAGE 1-A

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:33995 CAPLUS
 DOCUMENT NUMBER: 137:279005
 TITLE: Lewis-base binding properties of free-base
 β -octaethyltetraphenylporphyrins
 AUTHOR (S): Bhayappa, P.; Banavara, P.
 CORPORATE SOURCE: Department of Chemistry, Indian Institute of
 Technology, Chennai, 605 036, India
 SOURCE: Chemical Physics Letters (2002), 357(1,2), 109-112
 CODEN: CPLLET ISSN: 0009-2614
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

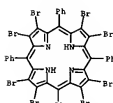
AB Sym. substituted perhaloporphyrins, 2,3,7,8,12,13,17,18-octa halo (bromo and chloro)-5,10,15,20-tetraphenylporphyrins (H2OTPPs and H2OCTPPs) have been examined as receptors for binding to Lewis bases. The kinetics of base binding to perhaloporphyrins showed an enhanced binding consta. for H2OCTPP relative to H2OTPP and follows a linear trend with increase in pKa values of the bases. The binding of Lewis-bases to perhaloporphyrin core is largely influenced by the extent of nonplanarity of the porphyrin core than the electron-withdrawing ability of the substituents. The higher binding consta. of H2OCTPP relative to H2OTPP have been interpreted in terms of greater nonplanarity of the former than the latter.

IT 320644-28-9, 2,3,7,8,12,13,17,18-Octachloro-5,10,15,20-tetraphenylporphyrin 131214-86-3, 2,3,7,8,12,13,17,18-Octabromo-5,10,15,20-tetraphenylporphyrin 131214-86-9, 2,3,7,8,12,13,17,18-Octabromo-5,10,15,20-tetraphenylporphyrin
 RI: CFS (Chemical process); PEP (Physical, engineering or chemical process); HCT (Reactant); PROC (Process); RACT (Reactant or reagent) (Binding with Lewis acid bases; Lewis-base binding properties of free-base β -octaethyltetraphenylporphyrins)
 RN 120644-23-9 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



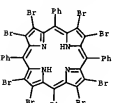
RN 131214-86-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)

L6 ANSWER 34 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



IT 465336-78-1P 465336-80-5P 465336-81-6P
 465336-82-9P 465336-87-2P 465336-90-7P
 465336-91-9P 465336-92-3P 465336-93-8P
 465336-95-2P 465336-96-3P 465336-97-6P
 465336-98-9P 465336-99-6P 465337-00-0P
 465337-01-3P
 RI: CFS (Chemical process); PEP (Physical, engineering or chemical process); SYN (Synthetic preparation); PREP (Preparation); PROC (Process) (Preparation of, formation consta. for Lewis-base binding properties of free-base β -octaethyltetraphenylporphyrin)
 RN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with quinoline (1:1) (SCI) (CA INDEX NAME)

CN 1
 CN 131214-86-3
 CNF C44 H22 Br8 M4

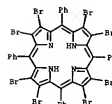


CN 2
 CN 91-22-5
 CNF C9 H7 N



L6 ANSWER 34 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RN 465336-80-5 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with pyridine (1:1) (SCI) (CA INDEX NAME)

CN 1
 CN 131214-86-3
 CNF C44 H22 Br8 M4

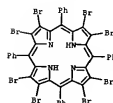


CN 2
 CN 110-86-1
 CNF C5 H5 N



RN 465336-81-6 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with 3-methylpyridine (1:1) (SCI) (CA INDEX NAME)

CN 1
 CN 131214-86-3
 CNF C44 H22 Br8 M4



CN 2

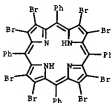
L6 ANSWER 34 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

CN 108-99-6
 CNF C6 H7 N



RN 465336-84-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with 1-methyl-1H-imidazole (1:1) (SCI) (CA INDEX NAME)

CN 1
 CN 131214-86-3
 CNF C44 H22 Br8 M4

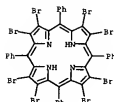


CN 2
 CN 616-47-7
 CNF C4 H6 N2



RN 465336-87-2 CAPLUS
 CN 4-Pyridinamine, N,N-dimethyl-, compd. with 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-21H,23H-porphine (1:1) (SCI) (CA INDEX NAME)

CN 1
 CN 131214-86-3
 CNF C44 H22 Br8 M4



CH 2

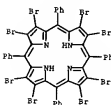
CRN 1122-58-3
CHF C7 H10 N2



RN 465536-92-7 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with piperidine (1:1) (9CI) (CA INDEX NAME)

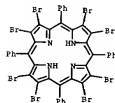
CH 1

CRN 131214-86-3
CHF C44 H22 Br8 N4



CH 2

CRN 110-89-4
CHF C5 H11 N



CH 2

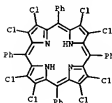
CRN 67-68-5
CHF C2 H6 O S



RN 465536-93-0 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with quinoxaline (1:1) (9CI) (CA INDEX NAME)

CH 1

CRN 120644-25-9
CHF C44 H22 Cl8 N4



CH 2

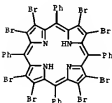
CRN 91-22-5
CHF C9 H7 N



RN 465536-91-8 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with 1,4-dioxane (1:1) (9CI) (CA INDEX NAME)

CH 1

CRN 131214-86-3
CHF C44 H22 Br8 N4



CH 2

CRN 123-91-1
CHF C4 H8 O2



RN 465536-92-9 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-, compd. with sulfolene[3-methane] (1:1) (9CI) (CA INDEX NAME)

CH 1

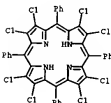
CRN 131214-86-3
CHF C44 H22 Br8 N4



RN 465536-95-2 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CH 1

CRN 120644-25-9
CHF C44 H22 Cl8 N4



CH 2

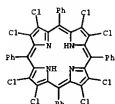
CRN 110-86-1
CHF C5 H5 N



RN 465536-96-3 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with 3-methylpyridine (1:1) (9CI) (CA INDEX NAME)

CH 1

CRN 120644-25-9
CHF C44 H22 Cl8 N4



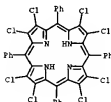
CM 2

CIN 108-99-6
CHF C6 H7 N

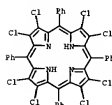
RN 465536-97-4 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with 1-methyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)

CM 1

CIN 120644-25-9
CHF C44 H22 C18 N4

CM 2

CIN 616-47-7
CHF C4 H6 N2

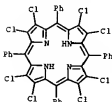
CM 2

CIN 110-89-4
CHF C5 H11 N

RN 465537-00-2 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with 1,4-dioxane (1:1) (9CI) (CA INDEX NAME)

CM 1

CIN 120644-25-9
CHF C44 H22 C18 N4

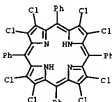
CM 2

CIN 123-91-1
CHF C4 H8 O2

RN 465536-98-5 CAPLUS

CN 4-Pyridinamine, N,N-dimethyl-, compd. with 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-21H,23H-porphine (1:1) (9CI) (CA INDEX NAME)

CM 1

CIN 120644-25-9
CHF C44 H22 C18 N4

CM 2

CIN 1122-58-3
CHF C7 H10 N2

RN 465536-99-6 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with piperidine (1:1) (9CI) (CA INDEX NAME)

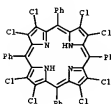
CM 1

CIN 120644-25-9
CHF C44 H22 C18 N4

RN 465537-01-3 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, compd. with sulfolane(methane) (1:1) (9CI) (CA INDEX NAME)

CM 1

CIN 120644-25-9
CHF C44 H22 C18 N4

CM 2

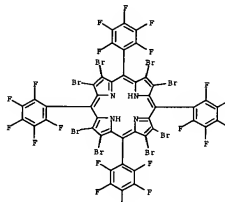
CIN 67-68-5
CHF C2 H6 O 5

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 35 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2002:337866 CAPLUS
 DOCUMENT NUMBER: 137:194452
 TITLE: Immobilization of β halogenated ironporphyrin in the silica matrix by the sol-gel process
 AUTHOR(S): Aparecida Vidotto, Edvaldo Silva Mourelle Moreira, Maria da Silva Vinhado, Fabio Cluffi, Katia Jorge, Rangel Macielotto, Otaciro Iamamoto, Yasuko Departamento de Quimica, Universidade de Sao Paulo, FFLCP, Ribeirao Preto, SP, 14040-901, Brazil
 SOURCE: Journal of Non-Crystalline Solids (2002), 304(1-3), 151-159
 CODING: UNCSBJ: ISSN: 0022-3093
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AS organic-inorg. material using robust metalloporphyrin halogenated in both meso and β -position, the iron complexes of 5,10,15,20-tetrakis(pentafluorophenyl)porphyrin and 2,3,7,8,12,13,17,18-octa- β -bromo-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin, which stabilize the porphyrine against oxidative degradation. The immobilization was developed by the sol-gel process using pyridine and imidazole as template. EPR spectra of the iron complex of 2,3,7,8,12,13,17,18-octa- β -bromo-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin show that the entrapment of ironporphyrin is in a higher symmetry compared to the systems in solution. A reduction of iron was observed in the presence of imidazole, determined by the absence of an EPR spectrum. The addition of chlorhydric acid vapor induced an oxidation of iron and a small quantity of iron in a high spin state was detected by comparison with axial symmetry. The ironporphyrine were active as catalyst for cyclooctene epoxidation, using isobutyrene and hydrogen peroxide as oxygen donors. The perhalogenated porphyrins immobilized had a smaller activity due to their iron oxidation and spin states.
 IT 139944-26-6R 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of hybrid organic-inorg. materials of iron metalloporphyrins halogenated in meso and β -positions immobilized in silica matrix by sol-gel process)
 RN 139944-26-6 CAPLUS
 CN 216,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)

L6 ANSWER 35 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

PAGE 1-A

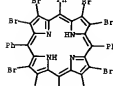


↓

PAGE 2-A

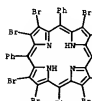
REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 36 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2002:308212 CAPLUS
 DOCUMENT NUMBER: 137:40848
 TITLE: Comparative Study of Structure-Properties Relationship for Novel β -Halogenated Ianthanide Porphyrins and Their Nickel and Free Base Precursors, as a Function of Number and Nature of Halogens Atoms
 AUTHOR(S): Spyrosilias, G. A.; Demopoulou, A. P.; Raptoglou, C. P.; Terzis, A.; de Montauzon, D.; Poulenc, J.; Coutelleas, A. G.
 CORPORATE SOURCE: Department of Chemistry Laboratory of Nonorganic Coordination Chemistry School of Science, University of Crete, Iraklion, Crete, 714 09, Greece
 SOURCE: Inorganic Chemistry (2002), 41(10), 2648-2659
 CODING: INOCHA: ISSN: 0020-1669
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 137:40848
 AS The synthetic route of partially β -halogenated via a metal-assisted reaction and perhalogenated Tb complexes is described. This protocol allows the facile insertion of the halogens (bromines or chlorides) to the porphyrin peripheral positions. The electronic absorption spectra and the redox potentials of the free porphyrins as well as the Tb complexes are drastically affected as the number of halogen atoms increase. In fact, two antagonistic effects are responsible for that, the inductive and the steric effects on the porphyrin ring. They result in a red shift for the Soret band and a stabilization/destabilization of the HOMOs/LUMOs which in turn is manifested by variations in the redox potentials. The compared with the previously reported structures of Tb(C18TPP) (OAC) (OESD 2-39)C6H11-MeOH and H2(C18TPP), as well as with other perhalogenated Ni porphyrins available in the literature.
 IT 139974-66-6R
 RI: PREP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystal structure)
 RN 139974-66-6 CAPLUS
 CN Foramide, N,N-dimethyl-, with 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-21H,23H-porphine (2:1) (SCI) (CA INDEX NAME)
 CN 1
 CN 132124-86-3
 CN C44 H22 Br8 N4



CM 2

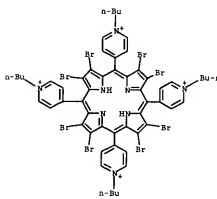
L6 ANSWER 36 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 CN 68-12-2
 CN C3 H7 N O
 H3C-N-C=O
 IT 120644-25-9P
 RI: PREP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, electronic spectra, redox potentials and complexation with cerium(III))
 RN 120644-25-9 CAPLUS
 CN 216,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)
 IT 132124-86-3P
 RI: PREP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, mol. structure, electronic spectra, redox potentials and complexation with cerium(III))
 RN 132124-86-3 CAPLUS
 CN 216,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 37 of 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:218837 CAPLUS
 DOCUMENT NUMBER: 137:5840
 TITLE: Catalytic activity of tetraarylporphyrins in the oxidation reactions of saturated hydrocarbons
 AUTHOR(S): Andreev, M. V.; Baysirli, E. I.; Marodov, G. B.; Korolev, Yu. M.
 CORPORATE SOURCE: Topolov Institute of Petrochemical Synthesis, Russian Academy of Sciences, Moscow, 117912, Russia
 SOURCE: Kinetics and Catalysis (Translation of Kinetika i Kataliz) (2002), 43(1), 38-44
 CODEN: KICAAH; ISSN: 0023-1584
 PUBLISHER: MAIK Nauka/Interperiodica Publishing
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 137:5840
 AB Conference proceedings. The oxidation of cyclic hydrocarbons by potassium permanganate catalyzed by the iron and manganese complexes of tetra-(4-N-butylpyridinium)porphyrin, tetraphenylporphyrin, and mixed porphyrins containing Ph and butylpyridyl substituents was studied in an aqueous acetonitrile medium. The test catalysts were dissolved in the reaction medium or adsorbed on layered aluminosilicates. It was found that the immobilization of metal complexes on layered aluminosilicates, as well as the bromination of porphyrins, decreased the activity of catalysts in a number of cases, although it improved their stability. The addition of pyridine in an equimolar amount with respect to metal complexes to the reaction mixture increased the activity of dissolved manganese complexes. An increase in the number of butylpyridyl meso-substituents in a porphyrin mol. improved the catalytic activity of a metal complex.
 IT 432028-75-69
 RI: SYN (Synthetic preparation); PREP (Preparation)
 (Catalytic activity of tetraarylporphyrins in the oxidation reactions of saturated hydrocarbons)
 RN 432028-75-6 CAPLUS
 CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,18-tetrayl)tetrakis[1-butyl-, tetraperchlorate (9CI) (CA INDEX NAME)
 CH 1
 CRN 432028-74-5
 CNF C56 H54 Br8 N8

L6 ANSWER 37 of 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



CH 2
 CNM 14787-73-0
 CNF Cl O4

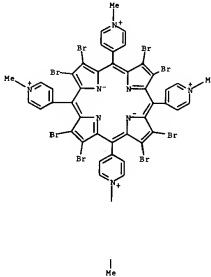


REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 38 of 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:102883 CAPLUS
 DOCUMENT NUMBER: 136:331159
 TITLE: Kinetics of zinc ion incorporation in base into a centrally aprotic beta-octabrominated cationic water-soluble porphyrin and its monolithium complex
 AUTHOR(S): Bailey, Sabrina L.; Hensbright, P.
 CORPORATE SOURCE: Department of Chemistry, Howard University, Washington, DC, 20059, USA
 SOURCE: Journal of Porphyrins and Phthalocyanines (2001), 5(12), 829-834
 CODEN: JPPTF2; ISSN: 1088-4246
 PUBLISHER: John Wiley & Sons Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The kinetics of zinc incorporation from pH 12 to 13 into the centrally aprotic BpF(4)2+ form of beta-octabromo-meso-tetrakis(N-methyl-4-pyridyl)porphyrin and its monolithium complex were studied at 25.0°C, ionic strength (I) = 0.10. The reactions were first order in porphyrin and total zinc-ions. For BpF(4)2+, the specific rate constant was 5.1 x 105 M-1 s-1 for Zn(OH)2 aqueous 9.9 x 104 M-1 s-1 for Zn(OH)3-, and Zn(OH)42- was unreactive. The Li-BpF(4)3+ complex had a formation constant with BpF(4)2+ of 1:1 x 103 M-1 from both kinetic and equilibrium measurements. In sols. containing both BpF(4)2+ and Li-BpF(4)3+, zinc incorporation proceeded only through BpF(4)2+.
 IT 43378-88-5
 RI: CFS (Chemical process); PREP (Physical, engineering or chemical process); FPP (Properties); RCT (Reactant); FROC (Process); RACT (Reactant or reagent)
 (Kinetics of zinc ion incorporation in base into a centrally aprotic beta-octabrominated cationic water-soluble porphyrin and its monolithium complex)
 RN 43378-88-5 CAPLUS
 CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,18-tetrayl)tetrakis[1-methyl-, bis(lithium salt) (9CI) (CA INDEX NAME)

L6 ANSWER 38 of 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A



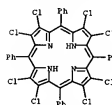
PAGE 2-A

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

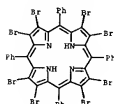
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS

L6 ANSWER 42 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:48195 CAPLUS
DOCUMENT NUMBER: 135:26367
TITLE: Unusual solvent dependent optical absorption spectral properties of free-base perhaloporphyrins
AUTHOR(S): Myrappa, P.; Sharma, P.
CORPORATE SOURCE: Department of Chemistry, Indian Institute of Technology, Madras, Chennai, 600 036, India
SOURCE: CHEMICAL PHYSICS LETTERS (2001), 342(1,2), 39-44
CODEN: CPLC 1989 0009-2614
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A pair of free-base perhaloporphyrins, 2,3,7,8,12,13,17,18-octabromo- and octachloro-5,10,15,20-tetraphenylporphyrins (H2OTPP and H2OTPP) were examined in solvents of varying polarity to delineate the effect of solvent on the optical absorption features. The perhaloporphyrins exhibit strong solvent-dependent absorption spectral features in contrast to 5,10,15,20-tetraphenylporphyrin, H2TPP. A dramatic red shift of Soret, B (445 nm) and visible, G (650 nm) were observed for perhaloporphyrins in polar solvents relative to nonpolar solvents. This was ascribed to the enhanced distortion of the macrocyclic ring induced by H-bonding interaction between the porphyrin core pyrrolic N-H or pyrrolidine nitrogens with the solvent molecules.
IT 120644-25-9, 21H, 22H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-, 121214-86-3, 2,3,7,8,12,13,17,18-Octabromo-5,10,15,20-tetraphenylporphyrin
RL: PFP (Properties)
(unusual solvent dependent optical absorption spectral properties of free-base perhaloporphyrins)
RN 120644-25-9 CAPLUS
CN 21H, 22H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)

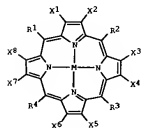


RN 131214-86-3 CAPLUS
CN 21H, 22H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



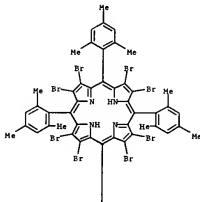
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 43 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:37140 CAPLUS
DOCUMENT NUMBER: 134:359572
TITLE: Recordable optical disk suitable for readout at 400-450 nm
INVENTOR(S): Sasa, Noboru
PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JQXZAP
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
PATENT NO. _____
KIND DATE APPLICATION NO. DATE
A2 20010522 JP 1999-322999 19991112
PRIORITY APP. INFO.: JP 1999-322999 19991112
OTHER SOURCE(S): MARPAT 134:359572
OI



AB The invention relates to a recordable optical disk contains a novel porphyrin derivative represented by a general formula (I) in which a hydrogen atom, metal atom X1-8 = H, Fe, alkyl, alkoxy, R1-4 = allylic, allycyclic, substituted in a recording layer. The recordable optical disk shows high sensitivity at a blue region.
IT 120644-48-0 139944-26-6 161405-60-3
RL: PFP (Properties); TDM (Technical or engineered material use); USES (Uses)
(Porphyrin derivative in recordable optical disk suitable for readout at 400-450 nm)
RN 120644-48-0 CAPLUS
CN 21H, 22H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (SCI) (CA INDEX NAME)

PAGE 1-A

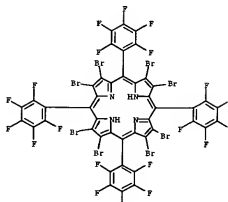


PAGE 2-A



RN 139944-26-6 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

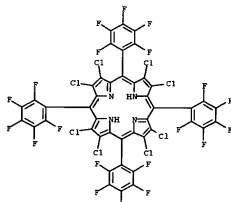


PAGE 2-A



RN 161405-60-3 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

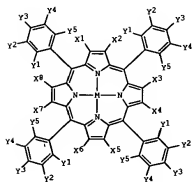
PAGE 1-A



PAGE 2-A

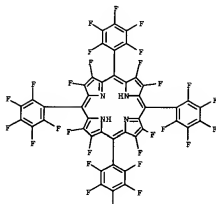


L6 ANSWER 44 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:171489 CAPLUS
DOCUMENT NUMBER: 134:359571
TITLE: Recordable optical disk suitable for readout at 400-450 nm
INVENTOR(S): Sasa, Noboru
PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CORRESPONDENCE: Patent
FAMILY ACC. NUM. COUNT: Japanese
PATENT INFORMATION: 1
PATENT NO. -----
KIND DATE APPLICATION NO. DATE
JP 2001138633 A2 20010522 JP 1999-322756 19991112
PRIORITY APPL. INFO.: JP 1999-322756 19991112
OTHER SOURCE(S): MARPAT 134:359571
GI



AB The invention relates to a recordable optical disk contains a novel polyolefin derivative represented by a general formula I (n = 2 hydrogen atoms, metal atom X1-8 = H, R; Y1-5 = H, halo, nitro, cyano, OH, carbonyl, alkyl, alkoxy, aryl, amino, acyl) in a recording layer. The recordable optical disk shows high sensitivity at a blue region.
IT 121399-88-0 129006-88-0 139244-26-6
121608-8-0 180885-28-9 232276-26-7
RI: P22 (Properties); TDM (technical or engineered material use); USES (Uses)
(poly)olefin derivative in recordable optical disk suitable for readout at 400-450 nm
RN 121399-88-0 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

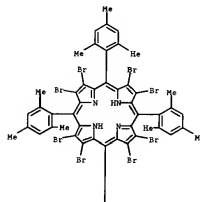


F

PAGE 2-A

RN 129066-48-0 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (SCI) (CA INDEX NAME)

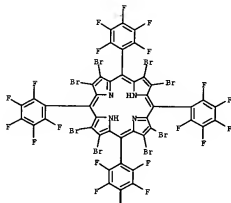
PAGE 1-A



PAGE 2-A

RN 139944-26-6 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)

PAGE 1-A

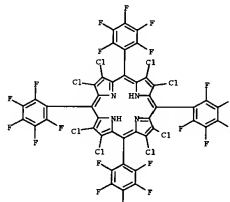


F

PAGE 2-A

RN 161405-60-3 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)

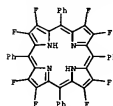
PAGE 1-A



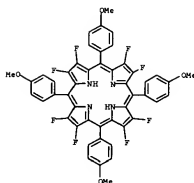
F

PAGE 2-A

RN 186885-28-9 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)

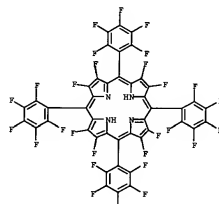


RN 339274-24-7 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(4-methoxyphenyl)- (SCI) (CA INDEX NAME)



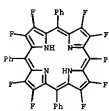
L6 ANSWER 45 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:294039 CAPLUS
 DOCUMENT NUMBER: 13518504
 TITLE: Structure and Photophysics of β -Octafluoro-meso-tetraarylporphyrins
 AUTHOR(S): Salimov, Valeriy V.; Woller, Eric K.; Tatum, Derek; DiMaggio, Stephen G.
 CORPORATE SOURCE: Department of Chemistry, University of Nebraska-Lincoln, Lincoln, NE, 68583-0304, USA
 SOURCE: Inorganic Chemistry (2001), 40(11), 2614-2619
 COUNTRY: US; CODEN: INCH; ISSN: 0020-1669
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB: The structure of TSP-coordinated [2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraphenylporphyrinato]zinc, Zn(F8TPP)-TSP, and photophysics studies of 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraphenylporphyrins, F8TPP, Zn(F8TPP), 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin, F5TPP, and [2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)porphyrinato]zinc, Zn(F5TPP), in benzotrifluoride, are reported. The octafluorinated F8TPP and pentafluorinated F5TPP porphyrins possess similar absorption spectra, but dissimilar x-ray crystal structures and disparate photophysics characteristics. These data cannot be easily accommodated within currently accepted theories which relate macrocyclic distortion and optoelectronic properties.
 IT 121399-88-0 186885-28-9
 RI: FPP (Properties)
 (optical and photophysics properties)
 RN 121399-88-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



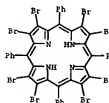
PAGE 2-A

RN 186885-28-9 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraphenyl- (9CI) (CA INDEX NAME)



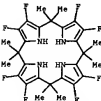
REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 46 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:15243 CAPLUS
 DOCUMENT NUMBER: 134:320054
 TITLE: Perfluorinated 2-nitrotetraphenylporphyrins: electrochemical and axial ligation properties
 AUTHOR(S): Boppre, Puttialah; Purushothaman, Bhavana
 CORPORATE SOURCE: Department of Chemistry, Indian Institute of Technology-Madras, Chennai, 600 036, India
 SOURCE: Journal of the Chemical Society, Perkin Transactions 2 (2001), (2), 238-242
 COUNTRY: IN; CODEN: JCPSD; ISSN: 1472-777X
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 134:320054
 AB: Perfluorinated 2-nitro-5,10,15,20-tetraphenylporphyrins, H2TPPBr(NO2) (n = 6 and 7) and their metal (CuII and ZnII) complexes were synthesized and characterized. The presence of mixed electron withdrawing (bromo- and nitro-) substituents at the β -pyrrole positions induces interesting electrochemical and axial ligation properties. Perfluorinated nitroporphyrins exhibit two successive one electron redox potentials with a pos. shift of >100 mV relative to their corresponding octabromotetraphenylporphyrin (H2TPPBr8) complexes. Axial ligation of various nitrogenous bases to H2TPPBr(NO2) complexes showed facile ligand binding with >50% enhancement in the equilibrium constants, K_{eq} , relative to H2TPPBr6. Surprisingly, H2TPPBr(NO2) complexes show similar axial ligation and electrochemical redox behavior. The acidic shift in electrochemical redox potentials and enhanced deficiency of the porphyrin π -system.
 IT 13114-86-3
 RI: FPP (Properties); RCT (Reactant); SPN (Synthetic preparation); FPEP (Preparation); RACT (Reactant or reagent); FPEP (Preparation, electronic spectrum and electrochem. redox, and complexation with copper and zinc)
 RN 13114-86-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (9CI) (CA INDEX NAME)



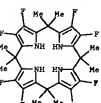
REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 50 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 ACCESSION NUMBER: 2005:70759 CAPLUS
 DOCUMENT NUMBER: 24:2935
 TITLE: Fluorinated Calix[4]pyrrole and Dipyrrolylquinonoline:
 Neutral Anion Receptors with Augmented Affinities and
 Enhanced Selectivities
 AUTHOR(S): Anzenbacher, Pavel, Jr.; Trey, Andrew C.; Miyaji,
 Hidekazu; Nurekova, Karolina; Lynch, Vincent M.;
 Marques, Manuel; Seemler, Jonathan L.
 CORPORATE SOURCE: Department of Chemistry and Biochemistry and Institute
 for Cellular and Molecular Biology, University of
 Texas at Austin, Austin, TX, 78712-1167, USA
 SOURCE: Journal of the American Chemical Society (2005),
 127(42), 10268-10272
 CODING: INCANT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Octamethyloctafluorocalix[4]pyrrole and 2,3-di(3,4-difluoropyrrol-2-yl)quinonoline were prepared from 3,4-difluoro-4-methylpyrrole. These latter two entities act as neutral anion receptors and bind anions such as fluoride, chloride, or dihydrogen phosphate with an enhanced affinity compared to their non-fluorinated congeners as judged from IR NMR, 19F NMR, and fluorescence emission spectroscopic analyses. The increase in affinity was especially high in case of chloride and dihydrogen phosphate anion, with the 2,3-di(3,4-difluoropyrrol-2-yl)quinonoline system, in particular, displaying an affinity for H2PO4- that was improved by 3 orders of magnitude as compared to its non-fluorinated congener. This improvement in the affinity for the dihydrogen phosphate is accompanied by change of color from pale yellow to orange, thus allowing the use of such compounds as naked-eye sensors for phosphate anion. In the case of the octafluorocalix[4]pyrrole system X-ray diffraction analyses revealed the presence of four different macrocyclic conformations in the solid state, as well as close intermolecular contacts mediated by apparent C-H...HF hydrogen bonds.
 IT 311804-89-49
 RI: FRP (Properties); RCT (Reactant); SPN (Synthetic preparation); FRP (Preparation); RACT (Reactant or reagent)
 (Preparation and anion binding by octafluorooctamethylcalixpyrrole and bis(difluoropyrrolyl)quinonoline)
 RN 311804-81-6 CAPLUS
 CM 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-5,10,15,20,22-octamethyl- (9CI) (CA INDEX NAME)



IT 311804-87-2P 311804-88-3P 311804-89-4P
 311804-94-1P

L6 ANSWER 50 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

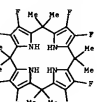


CM 2
 CRN 1112-67-0
 CMF C16 H36 N . Cl



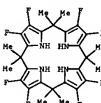
● Cl-

RN 311804-89-4 CAPLUS
 1-Butanaminium, N,N,N-triethyl-, phosphate, compd. with
 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-
 5,10,15,20,22-octamethyl-21H,23H-porphine (1111) (9CI) (CA INDEX
 NAME)
 CM 1
 CRN 311804-81-6
 CMF C28 H28 F8 N4



CM 2

L6 ANSWER 50 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 RI: FRP (Properties); SPN (Synthetic preparation); FRP (Preparation);
 (Prep. and anion binding by octafluorooctamethylcalixpyrrole and
 bis(difluoropyrrolyl)quinonoline)
 RN 311804-87-2 CAPLUS
 1-Butanaminium, N,N,N-triethyl-, fluoride, compd. with
 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-
 5,10,15,20,22-octamethyl-21H,23H-porphine (1111) (9CI) (CA INDEX
 NAME)
 CM 1
 CRN 311804-81-6
 CMF C28 H28 F8 N4



CM 2
 CRN 429-41-4
 CMF C16 H36 N . F



● F-

RN 311804-88-3 CAPLUS
 1-Butanaminium, N,N,N-triethyl-, chloride, compd. with
 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-hexahydro-
 5,10,15,20,22-octamethyl-21H,23H-porphine (1111) (9CI) (CA INDEX
 NAME)
 CM 1
 CRN 311804-81-6
 CMF C28 H28 F8 N4

L6 ANSWER 50 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

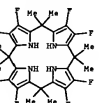
CM 3
 CRN 14066-20-7
 CMF H2 O 4 P



CM 4
 CRN 10549-76-5
 CMF C16 H36 N



RN 311804-94-1 CAPLUS
 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20,22,24-
 hexahydro-5,10,15,20,22-octamethyl-, compd. with
 sulfinylbis[acetate] (11) (9CI) (CA INDEX NAME)
 CM 1
 CRN 311804-81-6
 CMF C28 H28 F8 N4



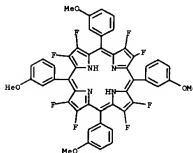
CM 2
 CRN 67-68-5
 CMF C2 H6 O 5



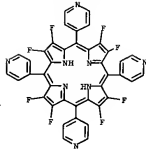
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 51 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 2000168038 CAPLUS
 DOCUMENT NUMBER: 133:252219
 TITLE: synthesis of octafluoro-meso-tetraarylporphyrins and their metal complexes for use as catalysts
 INVENTOR(S): Bhagto, Stephen G.
 PATENT ASSIGNOR(S): University of Nebraska-Lincoln, USA
 SOURCE: U.S., 10 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

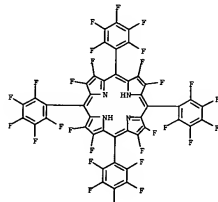
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6124462	A	20000926	US 1997-094691	19971219
PRIORITY APPL. INFO.: US 1997-094691				
OTHER SOURCE(S): CASREACT 133:252219; MARPAT 133:252219				
AB The title compds. are synthesized by reacting 3,4-difluoropyrrole with an aromatic aldehyde in the presence of boron trifluoride etherate, followed by oxidation. The difluoropyrrole used in this reaction is produced by reacting 3,3,4,4-tetrafluoropyrrolidinium or its corresponding salt, with a base such as potassium tert-butoxide. The metalloporphyrins of the present invention are synthesized by deprotonating β -octafluoro-meso-tetraarylporphyrin ligands and treating said ligands with metal ions.				
IT 186885-28-CP 255778-60-CP				
32: 19F (Industrial manufacture); 37N (Synthetic preparation); PREP (Preparation)				
(Synthesis of octafluoro-meso-tetraarylporphyrins and their metal complexes for use as catalysts)				
EN 186885-29-0 CAPLUS				
CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetra-(3-methoxyphenyl)- (SC1) (CA INDEX NAME)				



EN 255778-60-8 CAPLUS
 CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetra-4-pyridyl- (SC1) (CA INDEX NAME)



IT 121399-88-CP 186885-28-CP
 NL: RCT (Reactant); SYN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (Synthesis of octafluoro-meso-tetraarylporphyrins and their metal complexes for use as catalysts)
 EN 121399-88-0 CAPLUS
 CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (SC1) (CA INDEX NAME)

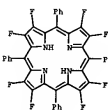


PAGE 1-A



PAGE 2-A

EN 186885-28-9 CAPLUS
 CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraphenyl- (SC1) (CA INDEX NAME)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 52 OF 148 CAPJUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:170924 CAPJUS
DOCUMENT NUMBER: 133:296117
TITLE: Unpolling of a Metal-Carbon Bond: A Potential Route to
Porphyrin-Based Methane Functionalization Catalysts
AUTHOR(S): Nelson, Andrew P.; Dumesno, Stephen G.
CORPORATE SOURCE: Department of Chemistry, University of
SOURCE: Nebraska-Lincoln, Lincoln, NE, 68583-0304, USA
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY (2000),
122(35), 8569-8570
CODEN: JACSMT 1558: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

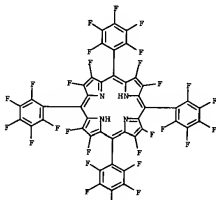
AB A modified Rh porphyrin complex performs each of the reactions in a formal
catalytic cycle involved in converting methane, triphenylphosphine, and
strong acid to a methyldiphosphonium salt and dihydrogen. The key design
principle, that ligand modification can so increase metal nucleofugacity
that nucleophilic substitution can be activated without compromising
alkene and H activation, is drawn directly from fundamental concepts of
chemical bonding. Developing an efficient catalytic system from these or
similar components requires dramatically accelerated rates of the methane
activation and nucleophilic functionalization.

IT 13399-48-0
RI CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES
(Uses)

EN (Ligands unpolling of metal-carbon bond and route to porphyrin-based
methane functionalization catalysts)

EN 123392-81-0 CAPJUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-
tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

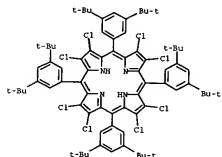


L6 ANSWER 53 OF 148 CAPJUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:412188 CAPJUS
DOCUMENT NUMBER: 133:202236
TITLE: Halogenation of metalloporphyrins
AUTHOR(S): Ruzanyanova, V. O.; Aksekenov, S. A.; Ponomareva, O.
CORPORATE SOURCE: N. Mironov, A. F.
SOURCE: Moscow State Academy of Fine Chemical Technology,
Moscow, 117571, Russia
Russian Journal of Bioorganic Chemistry (Translation of
CODEN: RJBCMT 1558: 1068-1620
PUBLISHER: MAIK Nauka/Interperiodica
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Thionyl chloride can chlorinate porphyrin complexes with transient metals
(Fe, Ni, or Cu) at the free β and meso-positions of the porphyrin
macrocycle. A more prolonged or rigorous treatment also causes the
chlorination of side alkyly substituents, mainly, Me groups.

IT 208642-06-1P
RI: SWP (Synthetic preparations); PREP (Preparation)
EN (Preparation from chlorination of metalloporphyrins)

EN 28945-06-1 CAPJUS
CN 21H,23H-Porphine, 5,10,15,20-tetrakis(3,5-bis(1,1-dimethylethyl)phenyl)-,
2,3,7,8,12,13,17,18-octachloro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 52 OF 148 CAPJUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 54 OF 148 CAPJUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:426679 CAPJUS
DOCUMENT NUMBER: 133:265643
TITLE: The oxidation of ethylbenzene and other alkylaromatics
by diogenes catalyzed by iron(III)

AB The oxidation of ethylbenzene and other alkylaromatics
by diogenes catalyzed by iron(III)
AUTHOR(S): Evans, Steven; Lindsay Smith, John R.
CORPORATE SOURCE: Department of Chemistry, University of York, York,
YO10 5DD, UK
SOURCE: Perkin 2 (2000), (7), 1541-1552
CODEN: PERDYO

PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:265643

AB The oxidation of ethylbenzene with diogenes catalyzed by iron(III)
porphyrins

is a solvent free system was studied over the temperature range 30-110
C. The time dependence of the formation of the three main
products, 1-phenylethanol, acetophenone and 1-phenylethyl hydroperoxide,
and the fate of the iron porphyrin are interpreted in terms of a free
radical autocatalytic mechanism. The yields of the oxidation products are
determined

by the rate of reaction and by the lifetime of the catalyst. Catalyst
degradation is shown to involve reaction of the porphyrin ligand with
1-phenylethanol and 1-phenylethylperoxy radicals. The disadvantages of
increased induction periods and longer reaction times of the oxides,
observed

at lower reaction temps. are counter balanced by increased catalyst
turnovers. Less extensive studies on the oxides of toluene, cumene,
[2-methylpropyl]benzene and tert-butylbenzene support the overall
mechanism proposed for ethylbenzene. A comparative study using the
catalysts iron(III) 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(2,6-
dichlorophenyl)porphyrin and iron(III) tetrakis(pentafluorophenyl)porphyrin
n and five of its deriva. reveals that halogenation of the β -pyrrole
positions markedly increases the activity of the catalysts but not the
stability of the porphyrin towards degradation. The highest yields were
obtained with the p-oxo dimer of iron(III)

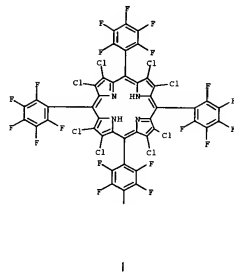
tetrakis(pentafluorophenyl)porphyrin and iron(III) tetrakis(4-
dimethylamino-2,3,5,6-tetrafluorophenyl)porphyrin.

IT 161405-60-3 CAPJUS
RI: RCT (Reactant); SWP (Synthetic preparations); PREP (Preparation); RACT
(Reactant or reagent)

EN (Oxidation of ethylbenzene by diogenes catalyzed by iron porphyrins)

EN 161405-60-3 CAPJUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-
tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

REFERENCE COUNT: 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE XS FORMAT

ACCESSION NUMBER: 2000141728

DOCUMENT NUMBER: 133:213939

TITLE: Mechanistic Studies of Porphinato(Iron)-Catalyzed

Isobutane Oxidation. Comparative Studies of Three Classes of Electron-Deficient Porphyrin Catalysts
Moore, Kevin T.; Morvath, Istvan T.; Thelen, Michael J.

DEPARTMENT SOURCE: Department of Chemistry, University of Pennsylvania, Philadelphia, PA, 19104-6323, USA

SOURCE: Inorganic Chemistry (2000), 39(18), 3125-3139

CODEN: INOCAL; ISSN: 0020-1669

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We report herein a comprehensive study of porphinato(iron)-catalyzed isobutane oxidation in which mol. oxygen is utilized as the sole oxidant. These catalytic reactions were carried out and monitored in both autoclave reactors and sapphire NMR tubes. In situ 19F and 13C NMR expts., coupled with GC analyses and optical spectra obtained from the autoclave reactions have enabled the identification of the predominant porphyrinic species present during PFe-catalyzed oxidation of isobutane. Electron-deficient PFe catalysts based on 5,10,15,20-tetrakis(pentafluorophenyl)porphyrin ([CPFe]4F2), 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin (Br4[CPFe]4F2), and 5,10,15,20-tetrakis(pentafluorophenyl)porphyrin ([CPFe]4F2) macrocycles were examined. The nature and distribution of hydrocarbon oxidation products show that an autoxid. reaction pathway dominates the reaction kinetics, consistent with a radical chain process. For each catalyst system examined, PFeII species were shown not to be stable under moderate O2 pressure at 80 °C in every case, the PFeII catalyst precursor was converted quant. to high-spin PFeIII complexes prior to the observation of any hydrocarbon oxidation products. Once catalytic isobutane oxidation is initiated, all reactions are marked by concomitant decomposition of the porphyrin-based catalyst. In situ 17O NMR spectroscopic studies confirm the incorporation of 17O from labeled water into the oxidation products, implicating the involvement of PFe-OH in the catalytic cycle. Importantly, Br4[CPFe]4F2-based catalysts, which lack macrocycle C-H bonds, do not exhibit augmented stability with respect to analogous catalysts based on [CPFe]4F2 and [CPFe]4F2 species. The data presented are consistent with a hydrocarbon oxidation process in which PFe complexes play dual roles of radical chain initiator, and the species responsible for the catalytic decomposition of organic peroxide. This modified Haber-Weiss reaction scheme

provides for the decomposition of tert-Bu hydroperoxide intermediates via reaction with PFe-OH complexes; the PFeIII species responsible for hydroperoxide decomposition are regenerated by reaction of PFeII with dioxygen.

under these exptl. conditions.

IT 139944-26-6

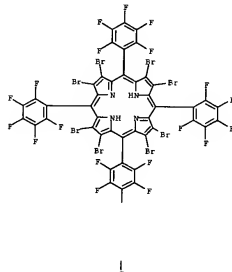
RT: RCT (Reactant); RACT (Reactant or reagent)

STudies of (porphinato)iron-catalyzed isobutane oxidation

RM 139944-26-6 CAPLUS

CM 218,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

REFERENCE COUNT: 94 THERE ARE 94 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE XS FORMAT

ACCESSION NUMBER: 2000128210

DOCUMENT NUMBER: 133:43367

TITLE: Triple-Excited States of Free-Base Porphin and Its

P-Octafluorinated Derivatives
Wu, Kiet A.; Day, Paul N.; Sacher, Ruth
Air Force Research Laboratory, Materials and Manufacturing Directorate AFRL/MLJ, Wright-Patterson Air Force Base, OH, 45433-7002, USA

SOURCE: Journal of Physical Chemistry A (2000), 104(20), 4741-4754

CODEN: JPCAPH; ISSN: 1089-5639

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB S. functional theory (DFT) electronic structure calculations were carried out to predict the structures, energetics, and triplet-triplet (T-T) spectra for the low-lying triplet states of free-base porphyrin (P22) and its P-octafluorinated deriv. (P-P22X) X = F, Cl, Br. The lowest triplet excited state of P22 and P-P22X was found to retain D2h symmetry with stretched C8-C8 and C8-C8 bond distances.

For free-base porphyrin, the singlet-triplet (S0-T1) gap obtained with the B3LY functional was in excellent agreement with the experimental phosphorescence value. Excitation energies computed by time-dependent DFT also provided a fine account of the observed T-T spectrum.

P-Fluorination had little effect on the singlet-triplet gaps of porphyrin. The S0-T1 and S0-T2 splittings for P-P22X were within 0.1 eV of the corresponding splittings in the unsubstituted porphyrin. All of the corresponding splittings in the unsubstituted porphyrin bands in the T-T spectra of P-P22X were predicted to be significantly (up to 0.45 eV) red-shifted in comparison to corresponding bands of the unsubstituted porphyrin.

144811-81-4, Octachloroporphine 144811-81-4,

Octachloroporphine 144811-81-4, Octachloroporphine

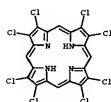
IT TPD (Properties)

(triplet excited states of free-base porphyrin and its

P-octafluorinated deriv.)

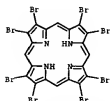
RM 144811-81-4 CAPLUS

CM 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro- (SCI) (CA INDEX NAME)

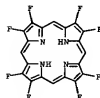


RM 144811-83-6 CAPLUS

CM 218,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo- (SCI) (CA INDEX NAME)



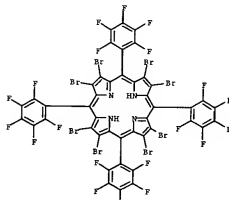
RN 144011-86-9 CAPLUS
CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 57 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 132:12866
DOCUMENT NUMBER: 132:12866
TITLE: Photocatalytic activation of oxygen by iron(III) porphyrins
AUTHOR(S): Hennig, Horst; Juppé, Doritt
CORPORATE SOURCE: Institut für Anorganische Chemie, Universität Leipzig, Leipzig, D-04103, Germany
JOURNAL: Journal für Praktische Chemie (Weinheim, Germany) (1999), 341(8), 757-767
SOURCE: CODEN: JPCHE4; ISSN: 1436-9566
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: German
AB Photocatalytic charge transfer excitation of tetraphenylporphyrinatoiron(III) complexes yields tetraphenylporphyrinatoiron(II) which is able to coordinate O₂ under formation of oxo-tetraphenylporphyrinatoiron(IV). Based on this photocatalytic reaction pathway photocatalytic oxygenation of α -pinene and other alkenes can be initiated. Fe(III) complexes of tetraphenylporphyrin, tetrakis(pentafluorophenyl)porphyrin, and octa-*p*-bromo-tetrakis(pentafluorophenyl)porphyrin, and octa-*p*-chloro-tetrakis(pentafluorophenyl)porphyrin were investigated photocatalytically with the aim to improve the low photocatalytic efficiency of tetraphenylporphyrinatoiron(III). The influence of substituents on the porphyrin ligand on the photocatalytic behavior of the corresponding Fe(III) complexes is measured mainly by temperature dependent UV/Vis spectroscopy. Both, the yield of oxygenation products formed photocatalytically with α -pinene and the product distribution (allylic alcoh. vs. epoxide) depend on the design of the porphyrin ligands coordinated with Fe(III).
17 139944-26-6 161405-60-3
AL: RCT (Reactant); SACT (Reactant or reagent)
[Preparation of Fe(III) porphyrin complexes]
RN 139944-26-6 CAPLUS
CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

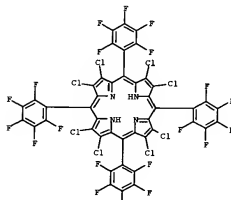


F

PAGE 2-A

RN 161405-60-3 CAPLUS
CN 218,238-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



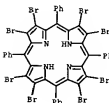
F

PAGE 2-A

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 58 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1995:770346 CAPLUS
 132:92953
 DOCUMENT NUMBER:
 TITLE: Electronic effects on the stereoselectivity of
 epoxidation reactions catalyzed by manganese
 porphyrins
 AUTHOR(S): Baciocchi, Enrico; Boschi, Tiziano; Casaroli, Luisa;
 Gatti, Carlo; Quasoli, Laura; Lupi, Andrea;
 Paolone, Roberto; Smith, Kevin M.; Tagliatesta,
 Pietro
 CORPORATE SOURCE: Dipartimento Chimica, Univ. La Sapienza, Rome,
 I-00185, Italy
 SOURCE: European Journal of Organic Chemistry (1995), (12),
 3281-3286
 PUBLISHER: Wiley-VCH Verlag GmbH
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A series of Mn(III) porphyrins progressively halogenated in the
 P-aryl positions were employed to catalyze the epoxidation of
 cis-stilbene by iodosylbenzene, and to study the role of the electronic
 effects on the stereoselectivity of this process. A gradual improvement
 in the stereoselectivity on increasing the number of P-halogen atoms was
 observed. The role of steric effects upon the epoxidation was also investigated
 by placing ortho-substituents in the meso-Pb rings, and it was found that
 steric effects are more important than electronic effects toward the
 stereoselectivity of this process. These results can be rationalized by
 proposing a competition between a non-stereoselective electrophilic
 pathway of addition and a stereospecific pathway of O insertion, the former
 being disfavored by electron-withdrawing substituents. Alternatively, the
 formation of an open intermediate between the Mn(V) oxo and the
 substrate could be suggested, where the stereoselectivity ought to be
 determined by the competition between closure of the epoxide ring and
 rotation around the C-C bond. In this case, the enhanced stereoselectivity given
 by our polyhalogenated porphyrins might be attributed to an acceleration
 of the epoxide ring closure caused by the electron-withdrawing effect of
 the halogen substituents.

IT 131214-66-3
 RI: RCT (Reactant) / RACT (Reactant or reagent)
 (coordination) steric and electronic substituent effects of porphyrin
 ligands on Mn porphyrin-catalyzed stereoselective epoxidation of
 cis-stilbene
 CN 131214-66-3 CAPLUS
 CN 21H,22H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (9Cl) (CA INDEX NAME)



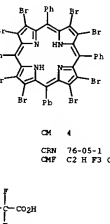
L6 ANSWER 59 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1995:935518 CAPLUS
 131:351141
 DOCUMENT NUMBER:
 TITLE: Structure and conformation of tetra-meso-,
 octa-P-, and dodeca-substituted
 22,24-dihydroporphyrins (porphyrin dications)
 AUTHOR(S): Senge, Mathias O.; Salbeck, Werner V.
 CORPORATE SOURCE: Institut Chemie, Organische Chemie, Freie Univ.
 Berlin, Berlin, D-14195, Germany
 SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences
 (1999), 54(7), 943-955
 CODEN: ZNRSZB ISSN: 0932-0776
 PUBLISHER: Verlag der Zeitschrift fuer Naturforschung
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A comparative crystallog. anal. of the conformation of porphyrin diacids
 with various substituent types reveals considerable differences in the
 degree of coplanarity and distortion modes. Diacids of
 5,10,15,20-tetraphenylporphyrins generally exhibit typical saddle-distorted
 macrocycles with displacements of the Cb positions in the range of 0.7-1.0
 Å. Adding peripheral substituents, i.e., using dodeca-substituted
 porphyrins for the diacid formation yields similar distortion types albeit
 with larger out-of-plane displacements. As a result of the combined
 effect of both peripheral interaction between the Cb and Cn substituents and
 core interaction between the 4 inner H atoms) steric strain the maximum
 Cb displacements reach 1.3-1.5 Å. Quite a different situation is
 observed for the diacids of 2,3,7,8,12,13,17,18-octabromoporphyrins. Here,
 macrocycles with pair-wise displacement of neighboring pyrrole rings and
 significant NH pyramidalization as well as with classic saddle distortion
 are found. Generally, octa-P-substituted porphyrin diacids show
 smaller degrees of coplanarity; Cb displacements ranged from 0.6 to 0.72
 Å. On the basis of the overall degree of conformational distortion
 (Δ24 = average deviation of the 24 macrocycle atoms from the mean
 plane), the 3 different types of porphyrin macrocycles studied differ
 considerably in their degree of conformational flexibility. For several
 porphyrin crystal structures with different counterions and/or solvate
 mol's, were obtained. Taking into account results from the literature,
 17,4,12,13,17,18-octabromyl-22,24-dihydro-5,10,15,20-
 tetraphenylporphyrin shows the smallest degree of flexibility (Δ24 =
 0.61-0.63 Å) (different x-ray structures), while 22,24-dihydro-
 5,10,15,20-tetraphenylporphyrin is more flexible (Δ24 = 0.42-0.52
 Å 4 structures). The largest flexibility is observed for
 2,3,7,8,12,13,18-octabromyl-22,24-dihydroporphyrin (Δ24 = 0.62-0.33
 Å 4 structures).

IT 161614-78-4
 RI: PFP (Properties)
 (crystal structure)
 CN 161614-78-4 CAPLUS
 CN 21H,22H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,13,20-tetraphenyl-,
 bis(trifluoroacetate), comp'd. with trichloromethane (1:1) (9Cl) (CA INDEX
 NAME)
 CN 1
 CN 67-66-3
 CNF C H Cl 3

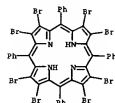
L6 ANSWER 59 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 REFERENCE COUNT: 45
 THESE ARE 45 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 59 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

IT 131214-66-3
 RI: RCT (Reactant) / RACT (Reactant or reagent)
 (coordination) steric and electronic substituent effects of porphyrin
 ligands on Mn porphyrin-catalyzed stereoselective epoxidation of
 cis-stilbene
 CN 131214-66-3 CAPLUS
 CN 21H,22H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (9Cl) (CA INDEX NAME)



IT 161614-77-3P
 RI: PFP (Properties); SPH (Synthetic preparation); PFP (Preparation)
 (crystal structure and conformation of porphyrin dications)
 CN 161614-77-3 CAPLUS
 CN 21H,22H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,13,20-tetraphenyl-,
 bis(trifluoroacetate) (9Cl) (CA INDEX NAME)
 CN 1
 CN 131214-66-3
 CNF C4 H2 Br 34



CN 2

C3N 76-95-1
CHW C2 H F3 O2

REFERENCE COUNT:

58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 1999:525327 CAPLUS
DOCUMENT NUMBER: 131:325692
TITLE: Intramolecular Electron Transfer of Diporphyrins Composed of Electron-Deficient Porphyrin and Electron-Rich Porphyrin with Photocontrolled Isomerization. [Erratum to document cited in CA130:160465]
AUTHOR(S): Tsuchiya, Shuji
CORPORATE SOURCE: Institute Industrial Science, Univ. Tokyo, Tokyo, 104, Japan
SOURCE: Journal of the American Chemical Society (1999), 121(25), 8132
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The first two sentences in Reference 41 on page 6521 should be the following:

"(41) the syntheses of β -octafluorinated porphyrins using 3,4-difluoropyrrole as a precursor have been reported by DiMaggio and Leroy. The compounds obtained from the 3,4-difluoropyrrole route have different phys. properties than those reported in reference 7 of J. Am. Chemical Society 1999, 121, 48-53."

IT 220213-38-4

RI: PEP (Formation, unclassified); PEP (Physical, engineering or chemical process); PEP (Properties); FORM (Formation, nonpreparative); PHOC (Process)

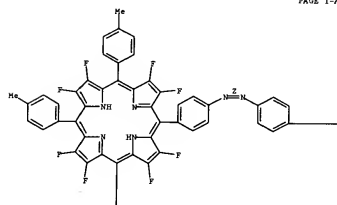
(fluorescence and photoisomerization and photoinduced intramol. electron-transfer of azobenzene-linked diporphyrin Zn complexes and free base analogs [Erratum] [Erratum])

RN 220213-35-4 CAPLUS

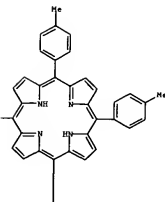
CN 21H,23H-Porphyrin, 2,3,7,8,12,13,17,18-octafluoro-5,10,15-tris(4-methylphenyl)-20-[4-[(1E)-4-[[10,15,20-tris(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl]azo]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



PAGE 2-A



PAGE 2-B



IT 220213-34-3P

RI: PEP (Physical, engineering or chemical process); PEP (Properties); SPN (Synthetic preparation); PEP (Preparation); PHOC (Process)

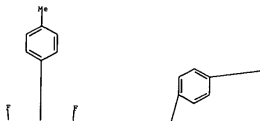
(fluorescence and photoisomerization and photoinduced intramol. electron-transfer of azobenzene-linked diporphyrin Zn complexes and free base analogs [Erratum] [Erratum])

RN 220213-34-3 CAPLUS

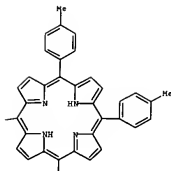
CN 21H,23H-Porphyrin, 2,3,7,8,12,13,17,18-octafluoro-5,10,15-tris(4-methylphenyl)-20-[4-[(1E)-4-[[10,15,20-tris(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl]azo]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

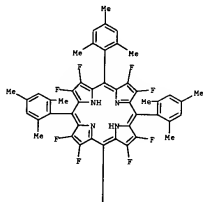
PAGE 1-A



PAGE 1-B



PAGE 1-A



PAGE 2-A



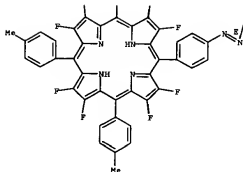
IT 220213-37-6

RI: FMO (Formation, unclassified); FORM (Formation, nonreparative) (in synthesis of azobenzene-linked diporphyrins (Erratum) (Erratum))

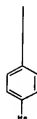
RN 220213-37-6 CAPLUS

CN 21H, 23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15-tris(4-methylphenyl)-20-((4-nitrophenyl))- (9CI) (CA INDEX NAME)

PAGE 2-A



PAGE 2-B



IT 220213-36-5

RI: PFP (Properties)

[Fluorescence quenching by electron transfer from electron-rich to electron-deficient porphyrin in relation to photophysics of azobenzene-linked diporphyrins (Erratum) (Erratum)]

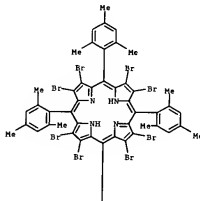
RN 220213-36-5 CAPLUS

CN 21H, 23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

16 ANSWER 61 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

ACCESSION NUMBER: 1999:523371 CAPLUS
DOCUMENT NUMBER: 131:299306
TITLE: Novel dodecaryporphyrins: synthesis and dynamic properties
AUTHOR(S): Musci, Claudia M.; Medforth, Craig J.; Voss, Lisa; Cacciola, Mark; Lebrilla, Carlotto Ma, Jian-Guo; Shelnutt, John A.; Smith, Kevin M.
CORPORATE SOURCE: Department of Chemistry, University of California, Davis, CA, 95616, USA
SOURCE: Tetrahedron Letters (1999), 40(34), 6159-6162
CODEN: TETLAV; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:299306
AB An investigation of the synthesis of dodecaryporphyrin using the Suzuki coupling reaction of arylboronic acids with octabromotetrakisarylporphyrins is reported. Variable temperature 1H NMR studies of these new porphyrins reveal several dynamic processes including the 1st examples of p-aryl rotation.
IT 129056-48-0 131214-88-3 129944-26-6
RE: RCT (Reactant) | RACT (Reactant or reagent)
(reactant for preparation of dodecaryporphyrins)
CN 129056-48-0 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (C1) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

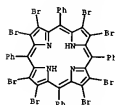
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 61 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A

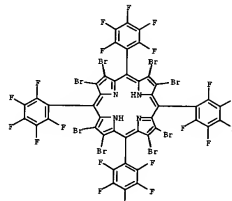


RN 131214-88-3 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (C1) (CA INDEX NAME)



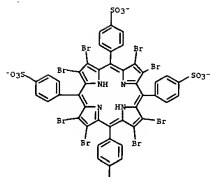
RN 129944-26-6 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (C1) (CA INDEX NAME)

PAGE 1-A



16 ANSWER 62 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN

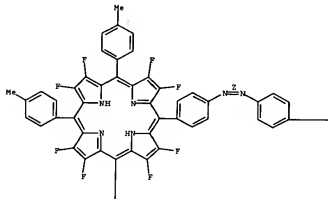
ACCESSION NUMBER: 1999:166534 CAPLUS
DOCUMENT NUMBER: 131:966507
TITLE: Separation and transport of lithium of 10-5 M in the presence of sodium chloride higher than 0.1 M by 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(4-sulfonatophenyl)porphyrin
AUTHOR(S): Sun, Haiping; Tabata, Masaki
CORPORATE SOURCE: Department of Chemistry, Faculty of Science and Engineering, Saga University, Saga, 840-8502, Japan
SOURCE: Talanta (1999), 49(3), 603-610
CODEN: TALTAJ; ISSN: 0039-9140
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A water-soluble porphyrin (2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(4-sulfonatophenyl)porphyrin (S2)(otbps)-, H2P4-) synthesized in the laboratory was applied to a solvent extraction method and a liquid membrane transport of lithium 2.0-5 M (M = mol dm-3) in the presence of sodium chloride 20.1 M. The lithium porphyrin with five neg. charges was extracted successfully into chloroform with tetrabutylammonium ion ((Me3C)4N+)
at pH 12.7. The extraction constant for the reaction of [LiP5-]a + S[(Me3C)4N+]a = d[Liawr.][(Me3C)4N]5[a]p is (1.9 ± 0.3) × 1018 M-5, where the subscripts a and o denote chemical species in aqueous and organic phases, resp.
Lithium was transported to an aqueous phase at pH 7 through a chloroform liquid membrane containing [(Me3C)4N]SHP. The extraction and transport mechanism was discussed from extraction const., chemical species and transportation rate. Lithium in sea water or serum sample was separated and its concentration was determined spectrophotometrically by the present method without any interference from sodium chloride. The interference from transition and heavy metal ions was masked by Mg-EDTA. A calibration curve was linear at 2 × 10-6-2 × 10-5 M at a precision of 1.3% (relative standard deviation).
IT 176173-60-1, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(4-sulfonatophenyl)porphyrin
RE: ANS (Analytical reagent use); ANST (Analytical study); USES (Uses)
(lithium determination in sea water and serum by solvent extraction and spectrophotometry using octabromo tetrakis sulfonatophenyl porphyrin)
RN 176173-60-1 CAPLUS
CN Bruteineallic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis-, ion(4-) (C1) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 63 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1999:395187 CAPLUS
 DOCUMENT NUMBER: 131:235638
 TITLE: Intramolecular Electron Transfer of Diporphyrins Composed of Electron-Deficient Porphyrin and Electron-Rich Porphyrin with Photocontrolled Isomerization. [Erratum to document cited in CA135:160405]
 AUTHOR(S): Tsuchiya, Shunji
 CORPORATE SOURCE: Institute Industrial Science, Univ. Tokyo, Tokyo, 106, Japan
 SOURCE: Journal of the American Chemical Society (1999), 121(27), 6521
 COUNTRIES: JACS: 1999: 0002-7863
 AMERICAN CHEMICAL SOCIETY
 PUBLISHED: Journal
 DOCUMENT TYPE: English
 LANGUAGE: AS Reference 40 and 41 relevant to the work reported on page 53 are given.
 IT 220213-35-4
 RE: PMP (Formation, unclassified); PEP (Physical, engineering or chemical process); FRP (Properties); FORM (Formation, nonpreparative); PROC (Process)
 [Fluorescence and photoisomerization and photoinduced intramolecular electron-transfer of azobenzene-linked diporphyrin in complexes and free base analogs (Erratum)]
 NN 220213-35-4 CAPLUS
 CN 23H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15-tris(4-methylphenyl)-20-[4-[(112)-[4-[(10,15,20-tris(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl]azophenyl]- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.

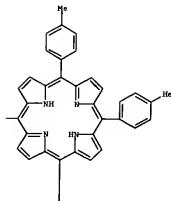
PAGE 1-A



PAGE 1-B

L6 ANSWER 63 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15-tris(4-methylphenyl)-20-[4-[(112)-[4-[(10,15,20-tris(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl]azophenyl]- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.

PAGE 1-A



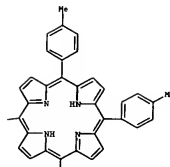
PAGE 2-A



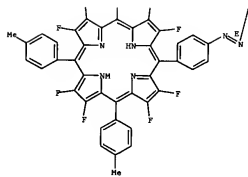
PAGE 1-B



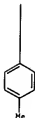
PAGE 2-B



IT 220213-36-39
 RE: PEP (Physical, engineering or chemical process); FRP (Properties); SYN (Synthetic preparation); PREP (Preparation); PROC (Process)
 [Fluorescence and photoisomerization and photoinduced intramolecular electron-transfer of azobenzene-linked diporphyrin in complexes and free base analogs (Erratum)]
 NN 220213-36-3 CAPLUS



PAGE 2-A



PAGE 2-B

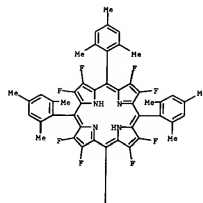
IT 220213-36-5

RI: PRP (Properties)

[Fluorescence quenching by electron transfer from electron-rich to electron-deficient porphyrin in relation to photophysics of azobenzene-linked diporphyrins (Erratum)]

RN 220213-36-5 CAPLUS

CN 21M,23M-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



PAGE 1-A



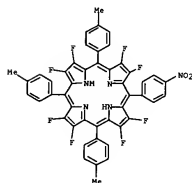
PAGE 2-A

IT 220213-37-6

RI: PRP (Formation, unclassified); FORM (Formation, nonpreparative) (In synthesis of azobenzene-linked diporphyrin Zn complexes (Erratum))

RN 220213-37-6 CAPLUS

CN 21M,23M-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15-tris(4-methylphenyl)-20-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 1999:285042 CAPLUS

DOCUMENT NUMBER: 130:304300

TITLE: 2,3,7,8,12,13,17,18-Octafluoro-5,10,15,20-

tetrakis(pentafluorophenyl)porphyrin

Le Roy, Jacques; Boudon, Arnaud; Toupet, Loïc
Ecole Normale Supérieure, Dep. Chim., USA CNRS, Paris, 75231, Fr.

SOURCE: Acta Crystallographica, Section C: Crystal Structure

Communications (1999), C55(3), 464-466

CODEN: ACSCDH ISSN: 0108-2701

PUBLISHER: Multigard International Publishers Ltd.

JOURNAL: English

AB The core of the title compound, C44H2F28N4, is essentially planar while the pentafluorophenyl groups are nearly perpendicular to the mean porphyrin plane. The mol. is centrosym. Crystallog. data are given.

IT 121399-48-0

RI: PRP (Properties)

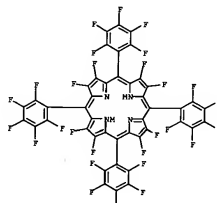
(Crystal structure of)

RN 121399-48-0 CAPLUS

CN 21M,23M-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-

tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

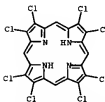


PAGE 2-A

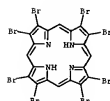
REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

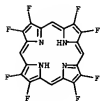
L6 ANSWER 65 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1999:262315 CAPLUS
 DOCUMENT NUMBER: 131:129798
 TITLE: Effects of halogenation on the ionized and excited states of free-base and zinc porphyrins
 AUTHOR(S): Nguyen, K.V. A.; Day, Paul M.; Fardick, Just
 CORPORATE SOURCE: Air Force Research Laboratory, AFRL/MLP, Materials and Manufacturing Directorate, Wright-Patterson Air Force Base, OH, 45433-7702, USA
 SOURCE: Journal of Chemical Physics (1999), 110(18), 9135-9144
 CODEN: JCPH66 1998: 0021-9296
 FURNISHER: American Institute of Physics
 JOURNAL: Journal
 LANGUAGE: English
 AB Ab initio electronic structure theory has been applied to study the effects of p-halogenation on the structure, ionization potentials (IP), and electronic spectra of free-base (PB2) and zinc porphyrins (ZnP). Electronic and IR (IR) spectra of p-octahalogenated free-base (P-PBxH2; X=F, Cl, Br) and zinc porphyrins (P-ZnPxH; X=F, Cl, Br) are predicted using TDHF, ESRP, and CIS methods. Computations of the excitation energies and IPs are also carried out using structures obtained with the ESRP d. functional. Valence IPs of PB2 and ZnP group, all p-halogen substituents slightly red shift the UV and visible bands of the free-base and zinc porphyrin chromophores. P-halogenation significantly red shifts the S bands with increasing magnitude upon going down the period. In addition, we gauge the effects of p-halogenation on the thermodynamic stability of ZnP by calculating the metal binding energies for P-ZnPxH. The authors found that all P-ZnPxHs have lower metal binding energies than the corresponding porphyrins are significantly larger (~up to 2 eV) than the S2 elimination enthalpies of the corresponding free-base analogs.
 144811-81-4, Octachloroporphine 144811-82-6, Octabromoporphine 144811-86-9, Octafluoroporphine
 IT RCT (Reactant); RACT (Reactant or reagent)
 (effects of halogenation on the ionized and excited states of free-base and zinc porphyrins)
 RN 144811-81-4 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro- (9C1) (CA INDEX NAME)



RN 144811-83-6 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo- (9C1) (CA INDEX NAME)

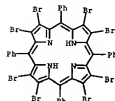


RN 144811-86-9 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro- (9C1) (CA INDEX NAME)

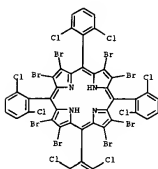


REFERENCE COUNT: 95 THERE ARE 95 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE PORTANT

L6 ANSWER 66 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1999:9221 CAPLUS
 DOCUMENT NUMBER: 130:204222
 TITLE: Synthesis and characterization of porphyrin complexes of iron(III) and manganese(III)
 AUTHOR(S): Krishnan, V.; Agarwal, D. D.; Rayappa, G.; Rastogi, Sachana
 CORPORATE SOURCE: Dept. of ITC, Indian Institute of Science, Bangalore, 560 012, India
 SOURCE: Indian Journal of Chemistry, Section A: Inorganic, Bio-inorganic, Physical, Theoretical & Analytical Chemistry (1998), 37A(10), 918-920
 CODEN: IJACR9 1998: 0376-4710
 FURNISHER: National Institute of Science Communication, CSIR
 JOURNAL: Journal
 LANGUAGE: English
 AB The porphyrin complexes of Fe(III) and Mn(III) bearing electron withdrawing substituents at p-pyrrole carbons exhibit interesting electronic structures. Porphyrin ligands studied include 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-21H,23H-porphyrin and the 5,10,15,20-tetrakis(2,6-dichlorophenyl) derivative. The complexes are electroactive and show reversible redox behavior. Coulometric data suggest that oxidation and reduction involves one-electron transfer each.
 132124-86-3
 IT RCT (Reactant); RACT (Reactant or reagent)
 (complexation with iron(III) and manganese(III), and redox potentials)
 RN 132124-86-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (9C1) (CA INDEX NAME)

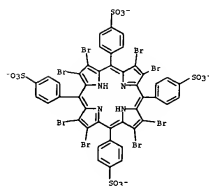


IT 107025-95-0P
 RCT (Reactant); SPN (Synthetic preparation) PREP (Preparation); RACT (Reactant or reagent)
 (preparation and complexation with iron(III) and manganese(III))
 RN 107025-95-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,6-dichlorophenyl)- (9C1) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

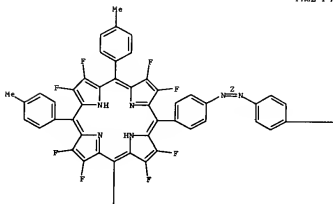
L6 ANSWER 67 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 199919120 CAPLUS
 DOCUMENT NUMBER: 130162452
 TITLE: Trace analysis of lithium with a water-soluble porphyrin
 AUTHOR(S): Tabata, Kenzaki; Sun, Hainping; Wakiyama, Jun
 CORPORATE SOURCE: Department of Chemistry, Faculty of Science and Engineering, Saga University, Saga, 840-8502, Japan
 SOURCE: Journal of Inclusion Phenomena and Molecular Recognition in Chemistry (1998), 32(2-3), 267-281
 CODEN: JINCDE; ISSN: 0922-0750
 PUBLISHER: Kluwer Academic Publishers
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A water-soluble porphyrin (2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetra-(4-sulfonatophenyl)porphyrin; K2 Cl₂ type-1; H₂P-1) was synthesized and developed for the determination and separation of Li⁺ ion in aqueous solution. The octabromo groups lower the basicity of the porphyrin by their electron-withdrawing effect, and enable the porphyrin to react with Li⁺ ion in alkaline aqueous solution to form the Li complex along with a shift of absorption maximum (log ϵ /mol⁻¹ dm³ cm⁻¹) of the Li porphyrin are 490.5 nm (5.31) and 734 nm (4.36). Na and K ions did not react with the porphyrin. The equilibrium constant for the reaction Li⁺ + H₂P-1 \rightleftharpoons [LiP]⁺ is 10^{4.21}. The [LiP]⁺ can be extracted into CHCl₃ as an ion-pair complex with Bu₄N⁺ ion (X⁻) and the extracted XSLiP dissociates to XSLiP and X⁻ in CHCl₃. The extraction constant for the reaction of [LiP]⁺-X⁻ + 5(X⁻)₄ \rightleftharpoons [XSLiP]⁺ + 5X⁻ is (9.4 \pm 0.7) + 1012 mol⁻⁴ dm¹², where subscripts of a and o denote chemical species in aqueous and organic phases, resp. The above results were developed for the determination of Li in serum, sea water and hot spring H₂O samples at 0.07-0.7 mg dm⁻³ (1 \times 10⁻⁵ - 1 \times 10⁻⁴ mol dm⁻³). The interference of heavy metal ions was masked by N,N'-1,2-ethanedithiolate (N,N'-carboxymethyl)glycyl-L-homocysteine (H₂Cys) (10 mg (DTPA) 2:2 or HEDTA if sample contain Mg(II) ion.
 IT 176175-40-18 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis-(4-sulfonatophenyl)porphyrin
 RI: AMS (Analytical aspect use); PEP (Properties); SYN (Synthetic Preparation); ANST (Analytical study); PREP (Preparation); USBS (Uses) (Trace determination of lithium with a water-soluble porphyrin by extraction-spectrophotometry)
 RN 176175-40-1 CAPLUS
 CN Benzene-sulfonic acids, 4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis-, ion(4-) (SCI) (CA INDEX NAME)



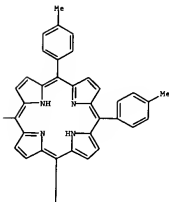
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 68 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 19991807625 CAPLUS
 DOCUMENT NUMBER: 130160405
 TITLE: Intramolecular Electron Transfer of Diporphyrins Composed of Electron-Deficient Porphyrin and Electron-Rich Porphyrin with Photocrosslinked Isomerization
 AUTHOR(S): Tsuchiya, Shigeo
 CORPORATE SOURCE: Institute of Industrial Science, University of Tokyo, Minato-Ku Tokyo, 106, Japan
 SOURCE: Journal of the American Chemical Society (1999), 121(1), 48-53
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB New azobenzene-linked diporphyrin Zn complexes and free base analogs were synthesized in an attempt to develop new materials for mol. electronics. These diporphyrin Zn complexes and the corresponding diporphyrin consist of electron-deficient porphyrin Zn complex and electron-rich porphyrin Zn complex or electron-deficient porphyrin and electron-rich porphyrin. These compounds, which are a new family of diporphyrins, exhibited the photoresponsive property with a structural change in the antenna: the trans-cis photoisomerization and cis-trans thermal recovery occurred and isomerization the fluorescence intensity of the cis-isomer produced by photoirradiation is smaller than that of the trans-isomer. This fluorescence quenching of the cis-isomer arises from the intramol. electron transfer from electron-rich porphyrin Zn complex to electron-deficient porphyrin Zn complex. Similar phenomena were observed for azobenzene-linked diporphyrin.
 This discovery that intramol. electron transfer between the porphyrin rings is caused by photocrosslinked isomerization is worthy of notice. Added, these compounds, bearing eight fluorine atoms at the 8-position of one porphyrin ring are the ideal materials for the practical application, because of their robust properties. This finding clearly suggests that new mol. are particularly useful in the development of photocrosslinked mol. electronics such as new switches.
 IT 200231-38-4
 RI: PMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PEP (Properties); FORM (Formation, nonpreparative); PREP (Preparation) (Fluorescence and photoisomerization and photoinduced intramol. electron-transfer of azobenzene-linked diporphyrin Zn complexes and free base analogs)
 RN 200231-38-4 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15-tris-(4-methylphenyl)-20-(4-((113)-[4-(10,15,20-tris-(4-methylphenyl)-21H,23H-porphin-5-yl)phenyl]azo)phenyl)- (SCI) (CA INDEX NAME)
 Double bond geometry as shown.

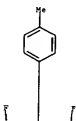
PAGE 1-A



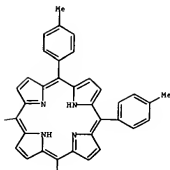
PAGE 1-B



PAGE 1-A



PAGE 1-B



PAGE 2-A



PAGE 2-B



IT 220213-34-3P

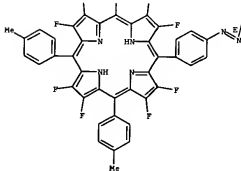
RI: PEP (Physical, engineering or chemical process); PEP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process) (fluorescence and photoisomerization and photoinduced intramolecular electron-transfer of azobenzene-linked diporphyrin Zn complexes and free base analogs)

HW 220213-34-3 CAPLUS

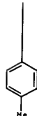
CN 21H, 23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15-tris(4-methylphenyl)-20-[4-{(1H)-[4-{(10,15,20-tris(4-methylphenyl)-21H,23H-porphin-5-yl)phenyl]azo}phenyl)- (PCI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 2-A



PAGE 2-B



IT 220213-36-9

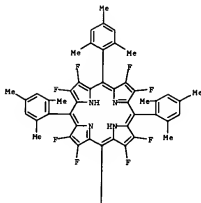
RI: PEP (Properties)

(fluorescence quenching by electron transfer from electron-rich to electron-deficient porphyrin in relation to photophysics of azobenzene-linked diporphyrins)

BN 220213-36-9 CAPLUS

CN 21H, 23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (PCI) (CA INDEX NAME)

PAGE 1-A

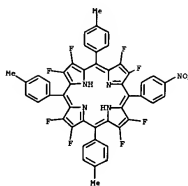


PAGE 2-A



IT 220213-37-6

RI: PNU (Formation, unclassified); FORN (Formation, nonrepreparative)
 (In synthesis of azobenzene-linked diporphyrin Zn complexes)
 RN 220213-37-6 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15-tris(4-methylphenyl)-20-(4-nitrophenyl)- (C1) (CA INDEX NAME)



REFERENCE COUNT: 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 69 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN

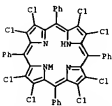
ACCESSION NUMBER: 1998-105861 CAPLUS
 DOCUMENT NUMBER: 130-188501
 TITLE: Structure-optical property relationships of porphyrins
 AUTHOR(S): Su, Weijie; Cooper, Thomas M.; Nguyen, Kiet; Brant, Mark C.; Brandelik, Donna; McLean, Daniel G.
 CORPORATE SOURCE: Wright Laboratory, WL/MEL, Wright-Patterson AFB, OH, 45433, USA
 SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1998), 3472 (Nonlinear Optical Liquids for Power Limiting and Imaging), 136-143
 CODEN: P5150G; ISSN: 0277-786X
 PUBLISHER: SPIE-The International Society for Optical Engineering
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Porphyrins are attractive compds. for optical applications. The authors were studying the relation between mol. structure and optical properties of a number of porphyrin compds. Structural variations explored include insertion of metal ions, extension of conjugation, halogenation and alkylation either at the pyrrole position or the meso-aryl groups. The characterization of these chromophores includes measurement of UV/visible, fluorescence and fluorescence lifetimes. Also, the authors have studied influencing limiting behavior appear to be the heavy atom effect, electron donating and withdrawing substituents conformation distortion and changes in conjugation. Detailed understanding will be gained from measurements of photophys. parameters underlying limiting behavior.

IT 120644-25-9

RI: FPO (Properties)
 (structure-optical property relationships of porphyrins)

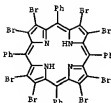
RN 120644-25-9 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl- (C1) (CA INDEX NAME)



RN 131214-46-3 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (C1) (CA INDEX NAME)

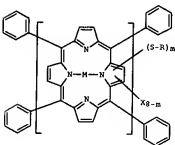
L6 ANSWER 69 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

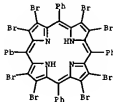
L6 ANSWER 70 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1998:795635 CAPLUS
 130:102947
 DOCUMENT NUMBER: Porphyrin compound and laser-recordable optical
 TITLE: recording medium using it
 INVENTOR(S): Mitsuoka, Toshihiro; Terano, Hiroshi; Kimagaya, Youjiro;
 Tsukahara, Hiroshi; Misawa, Tautayoshi; Takuma,
 Masahiko
 PATENT ASSIGNOR(S): Mitsui Chemicals Inc., Japan; Yamamoto Chemicals Inc.
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
 DOCUMENT TYPE: COORD. PROGAP
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: Japanese
 PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 1030652	A2	19981215	JP 1997-138509	19970528
PRIORITY APPL. INFO.			JP 1997-138509	19970328
OTHER SOURCE(S):		MAGPAT 130:102947		



AB The porphyrin compound comprises 1 (R = alkyl, (un)substituted Ph, naphthyl;
 X = H, halo; m = 1-8; M = 20+ divalent metal, trivalent or tetravalent
 metal derivative). The recording medium has a recording layer containing
 1. The
 IT medium showed high sensitivity for 520-690-nm laser light.
 331214-40-3, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-
 tetraphenylporphyrin
 RI ACT (Reactant) RACT (Reactant or reagent)
 (thioetherified porphyrin compound for laser-recordable optical recording
 medium)
 RN 131214-40-3 CAPLUS
 CN 21H,23H-Perphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (9CI) (CA INDEX NAME)

L6 ANSWER 70 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

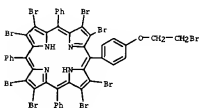


L6 ANSWER 71 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

ACCESSION NUMBER: 1998:532386 CAPLUS
 129:266109
 DOCUMENT NUMBER: Kinetics and mechanism of the reaction of mercury(II)
 TITLE: with a water-soluble octabromoporphyrin
 AUTHOR(S): Nakai, M.; Takata, H.
 CORPORATE SOURCE: Department of Chemistry, Faculty of Science and
 Engineering, Saga University, Saga, 840, Japan
 SOURCE: Journal of Porphyrin and Phthalocyanines (1998),
 2(4-5), 397-403
 COORD. JPRFEE: ISSN: 1088-4246
 PUBLISHER: John Wiley & Sons Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The reaction of mercury(II) hydroxide with 2,3,7,8,12,13,17,18-octabromo-
 5,10,15,20-tetrakis(4-methylphenyl)porphyrin, (TPPBr8)H2A- (H2P4-), to
 form the mercury(II) porphyrin ([TPPBr8]Hg4- (HgP4-)) was investigated in
 the pH range 6.2-8.5. The observed rate constant was first-order with
 respect
 to the mercury(II) concentration and decreased with increasing pH from pH
 6.2 to
 7.5 and then increased from pH 7.5 to 8.5. The rate expression was
 written as d[HgP4-]/dt = {KHP4-}[H+] + KHP2- = KHP4-([H+] + K1[H2O] +
 K-1[H+]-1)-[H2O]2/[H2P4-]}. The KHP, KHP2- and KHP values were found to
 be (1.33 ± 0.02) × 10⁴, (8.50 ± 0.06) × 10⁴ and (1.40
 ± 0.00) × 10⁴ M⁻¹ s⁻¹ resp., with K1 = [HP3-][H2P4-]-1/[H+]-1 =
 104.83 ± 0.04 and K-1 = [HP3-][H2P4-]-1 = 1010.02 ± 0.02. The
 activation parameters were ΔH‡P,thermo. = 94 ± 12 kJ mol⁻¹ and
 ΔS‡P,thermo. = 226 ± 22 J K⁻¹ mol⁻¹ for the HSP path,
 ΔH‡P3,thermo. = 33 ± 4 kJ mol⁻¹ and ΔS‡P3,thermo. = -6.4
 ± 0.4 J K⁻¹ mol⁻¹ for the HSP2 path and ΔH‡P2,thermo. = 40 ±
 7 kJ mol⁻¹ and ΔS‡P2,thermo. = 44 ± 4 J K⁻¹ mol⁻¹ for the HSP
 path. The kinetic results show the high reactivity of mercury(II)
 hydroxide towards the protonated porphyrin.
 176173-40-4, 2,3,7,8,12,13,17,18-Octabromo-5,10,15,20-tetrakis(4-
 methylphenyl)porphyrin
 RI: PEP (Physical, engineering or chemical process); PP (Properties); RCT
 (Reactant); PDC (Process); RACT (Reactant or reagent)
 (kinetics and mechanism of reaction of mercury(II) with water-soluble
 octabromoporphyrin)
 RN 176173-40-1 CAPLUS
 CN Benzenesulfonic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-
 porphine-5,10,15,20-tetrayl)tetrakis-, 1m(4-) (9CI) (CA INDEX NAME)

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

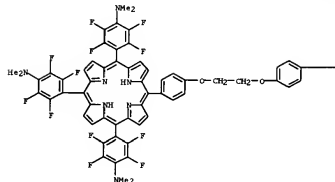
L6 ANSWER 74 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STM (Continued)
 ACCESSION NUMBER: 19981567479 CAPLUS
 DOCUMENT NUMBER: 1291269428
 TITLE: Novel covalently linked porphyrin trimers with redox-distinct properties
 AUTHOR(S): Sen, Arjita; Anandhi, U.; Krishnan, V.
 CORPORATE SOURCE: Chemical Biology Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, 560 012, India
 SOURCE: Tetrahedron Letters (1998), 39(36), 6539-6542
 PUBLISHER: COSMOS TELSAR, ISBN: 0040-4039
 DOCUMENT TYPE: Elsevier Science Ltd.
 LANGUAGE: English
 AB Two novel porphyrin trimers bearing different metal centers and/or different peripheral substituents were synthesized. These systems display interesting spectral and electrochem. redox properties.
 IT 213414-00-7
 RI RCT (Reactant) RACT (Reactant or reagent)
 (for preparation of ethanediol-linked tetrakis[phenyl]porphyrin trimer)
 RN 213414-00-7 CAPLUS
 CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octabromo-5-(4-(2-bromomethoxy)phenyl)-10,15,20-triphenyl- (PCI) (CA INDEX NAME)



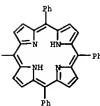
IT 213482-55-49
 RI: PRE (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation, cyclic voltammetry, NMR and electronic absorption spectra, and fluorescence quenching)
 RN 213482-55-4 CAPLUS
 CN Benzocaine, 4,4',4''-[20-[4-[2-[4-[C-[3,5-dimethyl-4-[2-[4-(2,3,7,8,12,13,17,18-octabromo-10,15,20-triphenyl-21H,23H-porphine-5-yl)phenylethoxy]phenyl]-10,15,20-triphenyl-21H,23H-porphine-5-yl)phenylethoxy]phenyl]-21H,23H-porphine-3,10,15-triyl]tris[2,3,5,6-tetrafluoro-N,N-dimethyl- (PCI) (CA INDEX NAME)

L6 ANSWER 74 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STM (Continued)
 REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

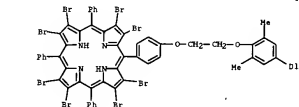
L6 ANSWER 74 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STM (Continued)
 PAGE 1-A



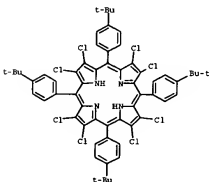
PAGE 1-B



PAGE 2-A

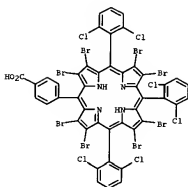


L6 ANSWER 75 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STM
 ACCESSION NUMBER: 19981566046 CAPLUS
 DOCUMENT NUMBER: 1291260548
 TITLE: Novel 1,2-Rearrangement of Porphyrinatozinc(II) Alkyne: Cis-Porphyrinoid Elimination/Olefin Metal-Hydride Insertion Pathway
 AUTHOR(S): Wu, Kun; Wu, Chao; Xie, Sheng
 CORPORATE SOURCE: Department of Chemistry, The Chinese University of Hong Kong, Shatin, Hong Kong
 SOURCE: Journal of the American Chemical Society (1999), 121(37), 9884-9887
 PUBLISHER: COSMOS TELSAR, ISSN: 0002-7863
 DOCUMENT TYPE: American Chemical Society
 LANGUAGE: English
 AB Rh(boc)P (boc = 5,10,15,20-tetrakis-(4'-tert-butylphenyl)-2,3,7,8,12,13,17,18-octachloroporphyrinate; R = CH2CH2C6H4X-p; X = NO2, Cl, H, Me, OMe) were prepared and their thermal isomerization to Rh(boc)P(R') (R' = CH2C6H4X-p) was studied. The authors deduced a cis-β-hydride elimination/olefin metal-hydride insertion pathway. The equilibrium constant and kinetics parameters, including deuterium kinetic isotope effect, were determined.
 IT 213481-24-4P, 5,10,15,20-Tetrakis(4-tert-butylphenyl)-2,3,7,8,12,13,17,18-octachloroporphyrin
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate for preparation of rhodium tetraaryloctachloroporphyrinato phenylethyl complexes)
 RN 213481-24-4 CAPLUS
 CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(4-(1,1-dimethylethyl)phenyl)- (PCI) (CA INDEX NAME)



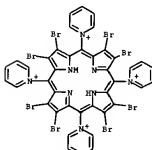
REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

[illegible]



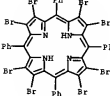
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 79 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1998:396754 CAPLUS
 DOCUMENT NUMBER: 129:67628
 TITLE: Ab initio calculations on porphyrins in the condensed phase
 AUTHOR(S): Dwy, P. N.; Wang, Z.; Pachter, R.
 CORPORATE SOURCE: Materials Directorate, Air Force Research Laboratory, Wright-Patterson AFB, OH, 45433, USA
 SOURCE: Materials Research Society Symposium Proceedings (1999), 489 (Electrical, Optical, and Magnetic Properties of Organic Solid-State Materials IV), 853-858
 CODING: HRPSTEN; ISSN: 0272-9172
 PUBLISHER: Materials Research Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Porphyrins are a promising class of materials for optical limiting applications, and in the condensed phase solvent effects have been shown to be significant. The authors report results with a method designed to simulate the effects of discrete solvent molecules, namely the effective fragment potential (EFP) approach which has been implemented for use in ab initio calculations. Further, a simulated annealing (SA) method has been implemented with the EFP solvation model in an attempt to solve the problem of multiple minima in clusters of water. The results with this method indicate some success on models of aqueous formamide and aqueous glutamic acid. Ab initio calculations can now be carried out on porphyrins, and the solvation methods are being updated for their use on these systems.
 IT 208993-40-8
 EL: FRP (Properties)
 (Ab initio calculations on octabromotetraphenylporphyrin cation in the condensed phase)
 RN 208993-40-8 CAPLUS
 CN Pyridinium, 1,1',1'',1'''-(2,3,7,8,12,13,17,18-octabromo-21M,23N-porphina-5,10,15,20-tetrayl)tetraakis- (SC1) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 80 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1998:302187 CAPLUS
 DOCUMENT NUMBER: 129:59211
 TITLE: Saddle-shaped dioxo-ruthenium(VI) and -osmium(VI) 2,3,5,7,8,10,12,13,15,17,18,20-dodecaphenylporphyrin (H2dpp) complexes. Synthesis, spectral characterization and alkene oxidation by [RuVI(dpp)O2]
 AUTHOR(S): Liu, Chun-Jiang; Yu, Wang-Yau; Peng, Shie-Ming; Mak, Thomas C. W.; Che, Chi-Ming
 CORPORATE SOURCE: Department of Chemistry, The University of Hong Kong, Hong Kong
 SOURCE: Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1998), (11), 1805-1812
 CODING: JCDTBI; ISSN: 0264-3466
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB An improved procedure for the preparation of the saddle-distorted porphyrin 2,3,5,7,8,10,12,13,15,17,18,20-dodecaphenylporphyrin (H2dpp) (yield = 75%) based on the Suzuki cross-coupling reaction between phenylboronic acid PhB(OH)2 and (2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenylporphyrin) has been developed. X-ray diffraction studies of [NiII(dpp)(CO)(py)] (M = Ru or Os) showed that 1 and 3 are isomorphous, and the porphyrin macrocycles exhibit severe out-of-plane saddle and ruffle distortions. In both 1 and 3 the pyrrole rings are alternately tilted up and down with respect to the least-squares plane of the 25-atom porphyrin core, and the pyrrole carbons experience an average displacement of 0.769 Å from the least-squares plane compared to 0.79 Å for free H2dpp, whereas the Ru and Os atoms are displaced by 0.1006 and 0.0792 Å from the 25-atom porphyrin core resp. The complex [RuII(dpp)O2] 2, prepared by *m*-chloroperoxybenzoic acid oxidation, is an active oxidant for alkene epoxides. In CH2Cl2 (containing 24 (weight/weight) pyrazole), styrene, norbornene and cis-stilbene were oxidized selectively to their resp. epoxides in excellent yield. Complete stereoretention was observed for the oxidation of cis-stilbene, however oxidation of cis-β-methylstyrene afforded significant anti, of trans-epoxide suggesting that a carbocationic mechanism is operative. The crystal structure of the complex [RuII(dpp)(paj2)] (5), the product of the monochloromeric alkene oxidant, was determined. Magnetic susceptibility measurement (μeff = 3.24 μB) suggests the formulation of RuIV with two unpaired electrons in its electronic ground state. The Ru-N (ps) bond distances are 2.02(13) and 2.05(12) Å. The reactions of 2 with alkenes in CH2Cl2 (with 28 ppm) follow second-order kinetics: rate = k[2][alkene]. For norbornene and styrene, the second-order rate constants, k1, in CH2Cl2 at 25.9 °C are (3.79 ± 0.04) × 10⁻³ and (4.78 ± 0.09) × 10⁻³ dm³ mol⁻¹ s⁻¹ resp.
 IT 131214-86-3
 (2,3,7,8,12,13,17,18-Octabromo-5,10,15,20-tetraphenylporphyrin)
 Ru, RuI (Reactant); H2O2 (Reactant or reagent)
 (Saddle-shaped dioxo-ruthenium(VI) and -osmium(VI) 2,3,5,7,8,10,12,13,15,17,18,20-dodecaphenylporphyrin (H2dpp) complexes and synthesis, spectral characterization and alkene oxidation by [RuVI(dpp)O2])
 RN 131214-86-3 CAPLUS
 CN 21M,23N-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SC1) (CA INDEX NAME)

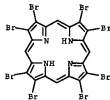


REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 83 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

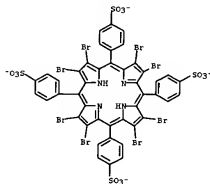
16 ANSWER 84 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:93209 CAPLUS
 DOCUMENT NUMBER: 128:132114
 TITLE: Lithium(I) porphyrin complex for the spectrophotometric determination of lithium ion in aqueous solution
 AUTHOR(S): Tabata, Masashi; Kusano, Tohru; Nishimoto, Jun
 CORPORATE SOURCE: Department of Chemistry, Faculty of Science and Engineering, Saga University, Saga, 840, Japan
 SOURCE: Analytical Sciences (1997), 13(Suppl., Asianalysis IV), 157-160
 CODEN: ANSCDH ISSN: 0910-6340
 PUBLISHER: Japan Society for Analytical Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A water-soluble octabromoporphyrin was synthesized for the determination of Li in water. The porphyrin reacts with Li in alkaline solution to form the Li complex along with a shift of absorption maximum to shorter wave length. Na and K ions do not react with the porphyrin. The equilibrium constant of the Li(I) porphyrin complex was determined and applied to the determination of Li in natural water. Interference of metal ions was removed by ligand buffer of Mg-EDTA complex.
 IT 144811-83-6
 RI ANS (Analytical reagent use); ARST (Analytical study); USES (Uses) (lithium porphyrin complex for spectrophotometric determination of lithium ion water)
 RN 144811-83-6 CAPLUS
 CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octabromo- (9CI) (CA INDEX NAME)



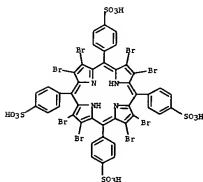
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 85 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:93207 CAPLUS
 DOCUMENT NUMBER: 128:249140
 TITLE: Ion-pair extraction of lithium ion by a water-soluble porphyrin
 AUTHOR(S): Hasegiri, Sumi Nishimoto, Jun; Tabata, Masashi
 CORPORATE SOURCE: Department of Chemistry, Faculty of Science and Engineering, Saga University, Saga, 840, Japan
 SOURCE: Analytical Sciences (1997), 13(Suppl., Asianalysis IV), 119-122
 CODEN: ANSCDH ISSN: 0910-6340
 PUBLISHER: Japan Society for Analytical Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The equilibrium of ion-pair extraction of lithium porphyrin [octabromoporphyrin: 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(4-sulfonatophenyl)porphyrin, H2BSPot-; H2BPA-] with tetrabutylammonium ion (K₄) was studied at 25° and I = 0.1 (NaCl, NaOH). Extraction and dissociation constants, of the ion-pair complexes of free base porphyrin, deprotonated porphyrin and lithium porphyrin, defined as K^{ex}(H2P)=[K4BSP]o/[H2P-]a[K₄]_o, K^{ex}(HP)=[K4BP]o/[HP-]a[K₄]_o, K^{ex}(LiP)=[K4LiP]o/[LiP-]a[K₄]_o, K^{ex}(H2P)=[K4BSP]o/[H2P]o and K^{ex}(LiP)=[K4LiP]o/[LiP]o, K^{ex}(H2P)=[K4BSP]o/[K4BSP]o and K^{ex}(LiP)=[K4LiP]o/[K4LiP]o, were determined. These values were found to be K^{ex}(H2P)=(0.5 ± 1.5) × 10¹³ (mol-4dm²), K^{ex}(H2P)=(3.5 ± 0.7) × 10⁻⁷ (mol dm⁻³), K^{ex}(HP)=(4.7 ± 0.4) × 10¹⁶ (mol-5dm³) and K^{ex}(LiP)K^{ex}(LiP)=[K4LiP]o/[K4LiP]o=(8.4 ± 0.7) × 10¹² (mol-4dm²), resp.
 IT 154783-99-00, lithium tetrabutylammonium salts 176173-80-1
 RI ANS (Other use, unclassified); PEP (Physical, engineering or chemical process); PBOC (Process); USES (Uses) (ion-pair extraction of lithium ion by water-soluble porphyrin)
 RN 154783-99-0 CAPLUS
 CN Benzenesulfonic acid, 4,4',4''',4''''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis- (9CI) (CA INDEX NAME)

16 ANSWER 85 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN Benzenesulfonic acid, 4,4',4''',4''''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis-, ion(4-) (9CI) (CA INDEX NAME)



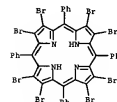
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



RN 176173-80-1 CAPLUS

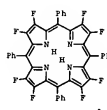
L6 ANSWER 86 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1997:70054 CAPLUS
 DOCUMENT NUMBER: 128:16704
 TITLE: DFT study of alkylnitroporphyrin dimers and brominated tetraphenylporphyrins
 AUTHOR(S): Wang, Shiguang; Day, Paul; Pachter, Ruth; McLean, Daniel G.
 CORPORATE SOURCE: Materials Directorate, Wright Laboratory, WPAFB, Wright-Patterson Air Force Base, OH, 45433-7702, USA
 SOURCE: Materials Research Society Symposium Proceedings (1997), 479 (Materials for Optical Limiting II), 331-336
 CODEN: MRSYDH; ISSN: 0272-9172
 PUBLISHER: Materials Research Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Geometry optimizations and electronic structure calcs. using D. Functional Theory (DFT) are reported for tetracarboxyphenylporphyrins (TAP), their dimers, and octabromotetraphenylporphyrin (OBP). The acetylene group contributes to the π -electron conjugation along the porphyrin ring for the HOMO and LUMO, and reduces significantly the HOMO-LUMO gap. The gap is further reduced in dimers. The planar geometry of the TAP dimer has a lower energy than the non-planar one. The geometry of HOBP is found to be non-planar, and the distortion of porphyrin ring is shown to be closely related to the HOMO-LUMO gap.

IT 131214-46-3 RI: PEP (Properties)
 (DFT study of alkylnitroporphyrin dimers and brominated tetraphenylporphyrins)
 RN 131214-46-3 CAPLUS
 CN 218,230-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

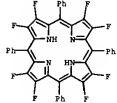
L6 ANSWER 87 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1997:70054 CAPLUS
 DOCUMENT NUMBER: 128:16718
 TITLE: 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraphenylporphyrin: first synthesis and x-ray crystal structure of the zinc complex
 AUTHOR(S): Leroy, Jacques; Sondon, Arnaud; Toupet, Loic; Rolando, Christian
 CORPORATE SOURCE: Ecole Normale Supérieure, Département de Chimie, URA CMRS 1679, Paris, F-75231, Fr.
 SOURCE: Chemistry - European Journal (1997), 3(11), 1899-1893
 CODEN: CHEURD; ISSN: 0947-6539
 PUBLISHER: Wiley-VCH Verlag GmbH
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB 2,3,7,8,12,13,17,18-Octafluoro-5,10,15,20-tetraphenylporphyrin (I) was prepared from 3,4-difluoropyrrole and benzaldehyde under Lindsey conditions. An X-ray crystal structure study of its ZnII complex has shown that the macrocyclic core is nonplanar, a result in apparent contradiction with a blue-shifted UV/vis spectrum. The results reported here demonstrate that a wide range of β -octafluoro-meso-arylated porphyrins, a new class of highly electron-deficient ligands, are potentially accessible from 3,4-difluoropyrrole, thus opening the door to, inter alia, efficient and robust condensation catalysts.

IT 189898-28-99, 2,3,7,8,12,13,17,18-Octafluoro-5,10,15,20-tetraphenylporphyrin
 RI: RCT (Reaction)
 (Preparation of octafluorotetraphenylporphyrin and the x-ray crystal structure of its zinc complex)
 RN 189898-28-9 CAPLUS
 CN 218,230-Porphine, 2,3,7,8,12,13,17,18-octafuoro-5,10,15,20-tetraphenyl- (9CI) (CA INDEX NAME)

L6 ANSWER 87 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 88 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1997:72353 CAPLUS
 DOCUMENT NUMBER: 128:7724
 TITLE: Aggregation and axial ligand exchange behavior of water-soluble pyrrole- β brominated porphyrins
 AUTHOR(S): Drouot, Francis; Devissier, Gilles; Paillet, R.; Zandler, Melvin E.
 CORPORATE SOURCE: Department of Chemistry, The Wichita State University, Wichita, KS, 67260-0051, USA
 SOURCE: Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1997), (28), 3699-3703
 CODEN: JCDTBI; ISSN: 0300-9246
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Synthesis of two water-soluble pyrrole- β brominated porphyrins, the tetrachloro salt of 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(N-methyl-4-pyridinyl)porphyrin (tetrakis(N-Me Pyridyl)- β -octabromoporphyrin, (BrTPPy)HCl) and the tetrachloro salt of 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis-(Ph sulfonatophenyl)porphyrin (BrTPPyS) and their zinc(II) derivs. are reported. The investigated porphyrins are highly complexed due to the presence of eight bromo substituents at the pyrrole- β positions and four aryl groups at the meso positions. At 1 \times 0.1M and T = 23°, the two sulfonated derivs., (BrTPPyS) and (BrTPPyS)Zn show a small tendency to aggregate while such behavior is almost negligible for the N-Me Pyridyl derivs. Like the unbrominated water-soluble zinc(II) porphyrin derivs., the pyrrole- β brominated zinc(II) porphyrins, with one or two water sol. as axial ligand(s) in aqueous solution, undergo ligand exchange reactions with nitrogenous bases. The calculated equilibrium constant, K, for this reaction is smaller in magnitude when compared to that obtained for the corresponding unbrominated zinc(II) porphyrin derivs. The equilibrium constant values reflect the basicity of the axial ligands.

IT 189898-00-18 RI: PEP (Properties)
 (Synthetic preparation) PREP (Preparation)
 (Preparation and absence of aggregation behavior in aqueous solution)
 RN 189898-00-1 CAPLUS
 CN Pyridinium, 4',4'',4''',4''''-(2,3,7,8,12,13,17,18-octabromo-23H-porphine-5,10,15,20-tetrayl) tetrakis[1-methyl-, tetrachloride, monohydrochloride (9CI) (CA INDEX NAME)

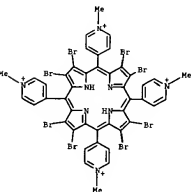
L6 ANSWER 90 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1997145915 CAPLUS
 DOCUMENT NUMBER: 127171539
 TITLE: A potent superoxide dismutase mimic: manganese β -octabromo-meso-tetrakis-(N-methylpyridinium-4-yl) porphyrin
 AUTHOR(S): Relnic-Haberle, Ines; Liochav, Stefan I.; Spasojevic, Ivan; Fridovich, Irwin
 CORPORATE SOURCE: Department Biochemistry, Duke University Medical Center, Durham, NC 27710, USA
 SOURCE: Archives of Biochemistry and Biophysics (1997), 343(2), 225-237
 CODING ABBREV: ISSN: 0003-9861
 PUBLISHER: Academic
 JOURNAL TYPE: Journal
 LANGUAGE: English
 AB Various modified metalloporphyrins offer a promising route to stable and active mimics of superoxide dismutase (SOD). Here we explore bromination on the pyrroles as a means of increasing the redox potentials and the catalytic activities of the copper and manganese complexes of a cationic porphyrin. Mn(II) and Cu(II) octabrominated 5,10,15,20-tetrakis-(N-methylpyridinium-4-yl) porphyrin, Mn(OTMPy)⁴⁺, and Cu(OTMPy)⁴⁺ were prepared and characterized. The rate constants for the porphyrin-catalyzed dismutation of O₂⁻ as determined from the inhibition of the cytochrome c reduction are $k_{cat} = 2.2 \times 10^8$ and 2.9×10^6 M⁻¹ s⁻¹, i.e., 1/500 reduction are calculated to be 12 μ M and 0.88 μ M, resp. The metal-centered half-wave potential was $E_{1/2} = +0.48$ V vs NHE for the manganese compound. Cu(OTMPy)⁴⁺ proved to be extremely stable, while its Mn(II) analog has a moderate stability, $\log K = 8.08$. Nevertheless, slow manganese dissociation from Mn(OTMPy)⁴⁺ enabled the complex to persist and exhibit catalytic activity even at the nanomolar concentration level and at high pH. The corresponding Mn(OTMPy)³⁺ complex exhibited significantly increased stability, i.e., demetallation was not detected in the presence of a 400-fold molar excess of EDTA at micromolar porphyrin concentration and at

pH 7.8. The β -substituted manganese porphyrin facilitated the growth of a SOD-deficient strain of Escherichia coli when present at 0.05 μ M but was toxic at 1.0 μ M. The synthetic approach used in the case of manganese and copper compound offers numerous possibilities whereby the interplay of the type and the number of β substituents on the porphyrin ring would hopefully lead to porphyrin compds. of increased stability, catalytic activity, and decreased toxicity.

IT 174580-26-8 174580-26-8U, protonated
 RL BAC (Biological activity or effector, except adverse) BSU (Biological study, unclassified) PSP (Properties) BSG (Biological study) (superoxide dismutase mimic activity of manganese β -octabromo-meso-tetrakis-(N-methylpyridinium-4-yl) porphyrin)

RN 174580-26-8 CAPLUS
 CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetraval) [tetrakis[1-methyl]-, tetrakis[hexafluorophosphate[1-]]] (9CI) (CA INDEX NAME)
 CN 1
 CNF 174580-25-7
 CNF C44 H20 Br8 N8

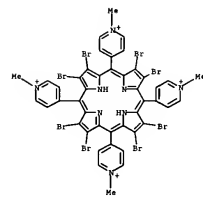
L6 ANSWER 90 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



CN 2
 CN 16919-18-9
 CFI P6 P
 CCI CCS



L6 ANSWER 90 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



CN 2
 CN 16919-18-9
 CFI P6 P
 CCI CCS

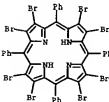


RN 174580-26-8 CAPLUS
 CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetraval) [tetrakis[1-methyl]-, tetrakis[hexafluorophosphate[1-]]] (9CI) (CA INDEX NAME)
 CN 1
 CNF 174580-25-7
 CNF C44 H20 Br8 N8

L6 ANSWER 91 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1997130685 CAPLUS
 DOCUMENT NUMBER: 1261350769
 TITLE: First x-ray crystal structure of a lanthanide(III) monopyrrolic complex using non-planar porphyrin rings
 AUTHOR(S): Spyridalis, Georgios A.; Despotopoulos, Alexia; Raptoglou, Catherine P.; Terzis, Aris; Coutsoules, Athanasios G.
 CORPORATE SOURCE: Laboratory of Bioinorganic Coordination Chemistry, Department of Chemistry, School of Science, University of Crete, Iraklion, 714 09, Greece
 SOURCE: Chemical Communications (Cambridge) (1997), (8), 783-784
 CODING ABBREV: ISSN: 1359-7345
 PUBLISHER: Royal Society of Chemistry
 JOURNAL TYPE: Journal
 LANGUAGE: English
 AB Twenty-three years after the first synthesis of lanthanide(III) porphyrins the x-ray crystal structure of [Tb(III)(β -Cl8pp)] (O2Me) (Me2SO)2 is reported (O2pp = 5,10,15,20-tetraphenylporphyrin monoligand, space group P21/c). The synthetic route to four halogenated porphyrins H2(β -Xotpp) (X = Cl or Br, n = 4 or 8) is described and compared with the corresponding [Tb(III)(β -Xotpp)] complexes. The highly distorted structure of the Tb(III) complex is compared with similar perhalogenated porphyrinic complexes. The x-ray structure of the octabrominated free base is also reported.

IT 189874-66-6P
 RL: PFP (Properties); SPN (Synthetic preparation); PREP (Preparation) (Preparation and crystal structure)

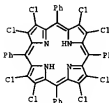
RN 189874-66-6 CAPLUS
 CN Porphine, N,N-dimethyl-, compd. with 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-1-21H,23H-porphine (2:1) (9CI) (CA INDEX NAME)
 CN 1
 CNF 131214-86-3
 CNF C44 H22 Br8 M4



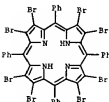
CN 2
 CN 68-12-2
 CNF C3 H7 N O



IT 120644-25-9P
 RI: FRP (Properties); RCT (Reactant); STW (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (Preparation, UV-visible spectrum and complexation with terbium)
 RN 120644-25-9 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



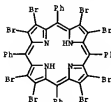
IT 131214-86-3P
 RI: FRP (Properties); RCT (Reactant); SPW (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (Preparation, mol. structure, UV-visible spectrum and complexation with terbium)
 RN 131214-86-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



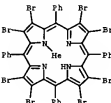
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

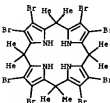
ACCESSION NUMBER: 1997:318649 CAPLUS
 DOCUMENT NUMBER: 127:4955
 TITLE: Syntheses and structural properties of severely distorted porphyrins: N-methyl derivatives
 AUTHOR(S): Clement, Todd E.; Wypen, Lisa T.; Khoury, Richard G.; Murco, Daniel J.; Smith, Kevin H.
 CORPORATE SOURCE: Dep. Chemistry, Univ. California, Davis, CA, 95616, USA
 SOURCE: Heterocycles (1997), 49(4), 651-658
 CODING: RCTCUM; ISSN: 0368-8414
 PUBLISHER: Japan Institute of Heterocyclic Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Syntheses and characterization of a series of N-methylated derivs. of sterically distorted porphyrins are reported; the work includes the first example of a tetra-N-methylated porphyrin obtained by methylation of an isact porphyrin.
 IT 131214-86-3
 RI: RCT (Reactant); RACT (Reactant or reagent)
 (syntheses and structural properties of severely distorted N-methylporphyrins)
 RN 131214-86-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



IT 190382-01-5P
 RI: SPW (Synthetic preparation); PREP (Preparation)
 (syntheses and structural properties of severely distorted N-methylporphyrins)
 RN 190382-01-5 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-21-methyl-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)

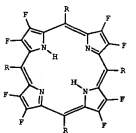


ACCESSION NUMBER: 1997:275704 CAPLUS
 DOCUMENT NUMBER: 127:17652
 TITLE: Calix[4]pyrrole: C-rim substitution and tunability of anion binding strength
 AUTHOR(S): Gale, Philip A.; Seidler, Jonathan L.; Allen, William E.; Truesome, Nicolai A.; Lynch, Vincent
 CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of Texas at Austin, Austin, TX, 78712-1867, USA
 SOURCE: Chemical Communications (Cambridge) (1997), (7), 665-666
 CODING: CHCOPS; ISSN: 1359-7345
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Electron-rich and electron-deficient C-rim substituted calix[4]pyrroles are synthesized and the anion binding ability of these receptors is found to be dependent upon the C-rim substituents.
 IT 190517-33-0P
 RI: STW (Synthetic preparation); PREP (Preparation)
 (preparation and tunability of anion binding strength of calixpyrroles)
 RN 190517-33-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20,22,24-hexahydro-5,10,15,20,22,24-octamethyl- (SCI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

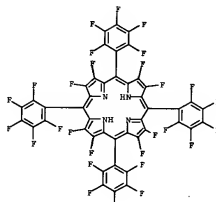
L6 ANSWER 94 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1997:180900 CAPLUS
 DOCUMENT NUMBER: 126:157325
 TITLE: 2,3,7,8,12,13,17,18-Octafluoro-5,10,15,20-tetraarylporphyrins and Their Zinc Complexes: First Spectroscopic, Electrochemical, and Structural Characterization of a Perfluorinated Tetraarylmetalporphyrin
 AUTHOR(S): Woller, Eric K.; Dineen, Stephen G.
 CORPORATE SOURCE: Department of Chemistry, University of Nebraska, Lincoln, NE 68583-3004, USA
 SOURCE: Journal of Organic Chemistry (1997), 62(6), 1588-1593
 COUNTRY: UOCCNH ISBN: 0022-0263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB A comment and general synthesis of β -octafluoroporphyrins **1** (R = Ph, C₆H₄, 3-NO₂C₆H₄) is reported. The structural, spectroscopic, and electrochemical data indicate that β -octafluoro-*meso*-tetraarylporphyrins are a new class of planar, electron-deficient ligands. Particularly impressive is the 0.5 V window over which the formal oxidation potential can be tuned using only aryl substituents. The invariance of the ligand structure with increasingly pos. formal oxidation potential is a key advance.
 IT electronic effects have been severed from the nonplanar conformations exhibited by all other highly electron-deficient porphyrins.
 IT 121939-86-0 CAPLUS
 RI: PFP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); INCT (Reactant or reagent)
 CN (preparation and characterization of octafluorotetraarylporphyrins)
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)

L6 ANSWER 94 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

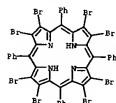
PAGE 1-A



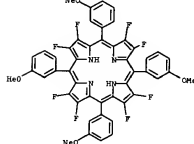
PAGE 2-A

CN 168885-28-9 CAPLUS
 CN 1996:703905 CAPLUS
 (SCI) (CA INDEX NAME)
 IT 168885-29-0P
 RI: PFP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 CN (preparation and characterization of octafluorotetraarylporphyrins)
 CN 168885-29-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(3-methoxyphenyl)- (SCI) (CA INDEX NAME)

L6 ANSWER 95 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1996:703905 CAPLUS
 DOCUMENT NUMBER: 126:161682
 TITLE: Nonlinear absorption in modified porphyrins
 AUTHOR(S): Tang, N.J. Su, W.J.; Cooper, T.; Adams, W.J.; Brandelik, D.; Brant, N.; Holsen, D.; Sutherland, R.
 CORPORATE SOURCE: Wright Lab, WFO/DEP, WPAFB, OH 45423, USA
 SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1996), 2853 (Nonlinear Optical Liquids), 149-157
 COUNTRY: PISDM; ISBN: 0277-786X
 PUBLISHER: SPIE-The International Society for Optical Engineering
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The authors study one free base and seven metallo-octafluorotetraarylporphyrins by several techniques. In a pico-second pump-probe experiment, the authors monitor the transient transmission of each sample up to 11 ns after it is irradiated by an intense laser pulse. Combined with the results from time-resolved fluorescence spectroscopy, the authors propose a simple model to interpret the transmission data. The authors attribute the reduction in the transmission to triplet state absorption and extract the triplet state absorption cross sections, as well as the lifetimes from the time dependent transmission data. In a sep. experiment where the transmission of a nanosecond laser pulse is measured with various input energies, the authors' measurement in the cross sections predicts the correct optical limiting behavior. The authors assess the overall optical limiting performance of all 8 samples by direct comparison with CSO at the same ground state transmission.
 IT 121214-86-3
 RI: PFP (Properties)
 CN (nonlinear absorption and optical limiting for modified porphyrins)
 CN 121214-86-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetraaryl- (SCI) (CA INDEX NAME)



L6 ANSWER 94 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

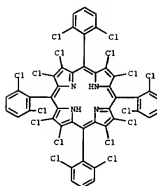


REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE IE FORMAT

L6 ANSWER 96 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1996-08653 CAPLUS
 DOCUMENT NUMBER: 126-67289
 TITLE: Photocatalytic oxidation of cyclohexane by
 (dibutyl(410032/Fe(III))porphyrins integrated systems
 Maidotti, Andrea; Molinari, Alessandro; Berghini, Paolo; Anadelli, Rosanna; Battioni, Pierrette; Mazny, Daniel
 AUTHOR(S):
 CORPORATE SOURCE: Dipartimento di Chimica, Centro di Studio su
 Fotoreattività e Catalisi del CNR, Università degli
 Studi di Ferrara, Via L. Borsari 46, Ferrara, 44100,
 Italy
 SOURCE: Journal of Molecular Catalysis A: Chemical (1996),
 113(1-2), 147-157
 COUNTR. NOC22: ISSN: 1381-1169
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The oxidation of cyclohexane by photoexcited (dibutyl(410032) has been
 investigated in the presence of iron meso-tetraarylporphyrins bearing
 different substituents in the *p*-pyrrole positions and/or in the
 meso-aryl groups. Irradiation at 325 nm leads to the reduction of the
 polyoxometalate with the simultaneous oxidation of cyclohexane to
 cyclohexyl radicals which can be detected by the ESR spin trapping technique. In
 one-electron to the Fe(III)porphyrin to give the ferrous complex. The
 subsequent reaction between this species and cyclohexyl radicals leads to
 the formation of α -alkyl-Fe(III)porphyrin complexes, as demonstrated
 by UV-visible and NMR spectroscopy. In the presence of oxygen, the
 photoexcited polyoxometalate has the role of initiating the activation of
 O₂ through its reduction to O₂⁻ and H₂O₂. As a consequence, cyclohexane
 is converted to cyclohexanol and cyclohexanol is a cyclic way. The
 Fe(III)porphyrin complex strongly affects the product distribution
 probably through its hydrogen peroxide and alkyl-hydroperoxide-dependent
 oxidation. In comparison with (dibutyl(410032) alone, a higher selectivity is
 obtained with the formation of cyclohexanol as a major product.

IT 134633-67-30 Iron complex
 RI: CAT (Catalyst use); PEP (Physical, engineering or chemical process);
 PKOC (Process); USES (Uses)
 (photocatalytic property of polyoxometalate/iron tetraarylporphyrin
 system for oxidation of cyclohexane)
 RN 134633-67-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,15,17,18-octachloro-5,10,15,20-tetrakis(2,6-
 dichlorophenyl)- [C1] (CA INDEX NAME)

L6 ANSWER 96 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 97 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1996-074168 CAPLUS
 DOCUMENT NUMBER: 125-315678
 TITLE: Gas reactive pigment, gas detector using the same, and
 gas detection method and apparatus using the detector
 Tanaka, Kazumichi; Igarashi, Chiaki; Sadeoka, Yoshihiko
 INVENTOR(S):
 PATENT ASSIGNEE(S): Ebara Corporation, Japan; Ebara Research Co., Ltd.
 SOURCE: Eur. Pat. Appl., 31 pp.
 COUNTR. EP/006
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

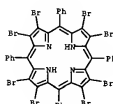
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 733901	A2	1996-05-25	EP 1996-104433	1996-03-20
EP 733901	A3	1996-05-25		
PT, SE				
JP 9711011	A2	1997-06-30	JP 1996-50431	1996-03-07
JP 144451	B	2001-11-21	JP 1996-85104567	1996-04-17
PRIORITY AFFIL. INFO.			JP 1995-85298	A 1995-02-20
			JP 1995-270139	A 1995-10-18
			JP 1996-50431	A 1996-03-07

OTHER SOURCE(S): MARPAT 125-315678
 A gas reactive pigment reactive to at least one of a halogen gas, a
 hydrogen halide gas, an acidic gas, an oxidizing gas, a basic gas, and an
 organic acid gas is provided. The pigment comprises a metal complex of
 tetraphenylporphyrin or a derivative thereof (I) wherein M represents a
 transition metal; a plurality of R's independently represent a hydrogen
 atom, a halogen atom, a nitro group, a cyano group or an alkyl group, or
 a tetraphenylporphyrin derivative (II) wherein a plurality of R's
 independently represent a hydrogen atom, a halogen atom, a nitro group, a
 cyano group or an alkyl group; a plurality of G's on the 4 Ph groups all
 represent a substituent selected from a halogen atom, a hydroxyl group, a
 sulfonic acid group, a carbonyl group, an alkyl group, and an amino
 group; the positions of which on the 4 Ph groups may be the same or
 different; and a, b, c and d which may be the same or different, each
 represents an integer of 0 to 5, indicating the number of G's on each Ph
 group; provided that the compound wherein all R's represent a hydrogen atom,
 and a, b, c and d all represent 0 is excluded. A detector for the above
 gases containing the reactive pigment; a method for detecting the above
 gases

Using the detector; and a detection apparatus for the above gases using the
 detector are also provided. The gas reactive pigment shows a color
 change, which can be measured in terms of the absorption spectrum change
 of said pigment at high sensitivity on contact with the above gases.

IT 134646-67-2,3,7,8,12,13,17,18-Octachloro-5,10,15,20-
 tetraphenylporphyrin
 RI: ARG (Analytical reagent use); DEV (Device component use); ANST
 (Analytical study); USES (Uses)
 (gas anal. by detector based on tetraphenylporphyrin metal complexes)
 RN 134646-67-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-
 (SC1) (CA INDEX NAME)

L6 ANSWER 97 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

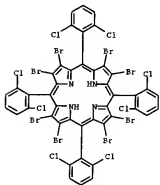


L6 ANSWER 98 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

ACCESSION NUMBER: 1996:673496 CAPLUS
 DOCUMENT NUMBER: 129:246125
 TITLE: Porphyrins bearing halogens at the meso-phenyl and
 p-pyrrolic positions: synthesis and spectral
 properties
 AUTHOR(S): Wijesekera, Tila; Dupre, Daniel; Cader, Mohamed S.
 S.J. Dolphin, David
 CORPORATE SOURCE: Dep. Chem., Univ. British Columbia, Vancouver, BC, V6T
 121, Can.
 SOURCE: Bulletin de la Societe Chimique de France (1996),
 133(7-8), 765-775
 CODEN: BUCHAJ; ISSN: 0037-8968
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English

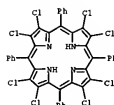
AB The synthesis of sym. porphyrins chlorinated at both ortho positions of
 the meso-aryl substituents, and the chlorination and bromination of the
 p-pyrrolic positions is reported. The p-chlorination of
 meso-tetraphenylporphyrin via its nickel(II) complex is also described.
 The authors communicate the 1st perchlorination of tetramesitylporphyrin,
 where halogen substitution occurred at the p-pyrrolic positions as
 well as at both the vacant meta positions of the trimethylphenyl groups.
 The iron complexes of these various polyhalogenated porphyrins are also
 described, since they are robust and efficient catalysts in oxidation
 reactions.

IT 107038-95-OP 120644-25-99 131214-86-3P
 RI: ACT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (Preparation and complexation with iron)
 RN 107035-95-0 CAPLUS
 CN 218, 23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,6-
 dichlorophenyl)- (SC1) (CA INDEX NAME)

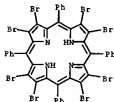


RN 120644-25-9 CAPLUS
 CN 218, 23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-
 (SC1) (CA INDEX NAME)

L6 ANSWER 98 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

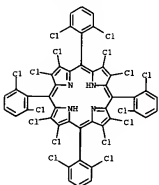


RN 131214-86-3 CAPLUS
 CN 218, 23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (SC1) (CA INDEX NAME)

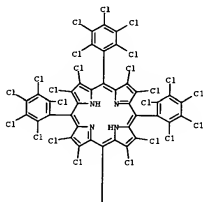


IT 134833-67-3P 183594-03-8P
 RI: SPN (Synthetic preparation); PREP (Preparation)
 (Preparation of)
 RN 134833-67-3 CAPLUS
 CN 218, 23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(2,6-
 dichlorophenyl)- (SC1) (CA INDEX NAME)

L6 ANSWER 98 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



RN 183594-03-8 CAPLUS
 CN 218, 23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-
 tetrakis(pentachlorophenyl)- (SC1) (CA INDEX NAME)



PAGE 1-A

L6 ANSWER 98 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

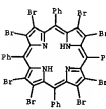


PAGE 2-A

L6 ANSWER 99 OF 148 CAILUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1996:552458 CAILUS
 DOCUMENT NUMBER: 125:291504
 TITLE: meso-Substituted octaethioporphyrins: synthesis, spectroscopy, electrochemistry and electronic structure
 AUTHOR(S): Mariprand, Gali; Dabai, Sarajay Mayya, Bhaskar G.
 CORPORATE SOURCE: School Chemistry, University Hyderabad, Hyderabad, 500 046, India
 SOURCE: Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1996), (16), 3429-3436
 CODEN: JCDTBI ISSN: 0300-9246
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The free-base, copper(II) and zinc(II) derivs. of 5,10,15,20-tetrakis(porphyrin) (aryl = Ph, 4-methylphenyl or 4-chlorophenyl) and the corresponding brominated 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(porphyrin) derivs. were synthesized and their spectral and redox properties compared by UV/visible, IR, NMR, ESR, and cyclic voltammetric methods. Substitution with the electron-withdrawing bromine groups at the pyrrole carbons has a profound influence on the UV/visible and IR NMR spectral features and also on the redox potentials of these systems. However, electron-withdrawing chloro or bromine groups at the para positions of the four Ph rings have only a marginal effect on the spectra and redox potentials of both the brominated and the nonbrominated derivs. The ESR data for the copper(II) derivs. of all these systems reveal that substitution at either the β -pyrrole carbons and/or the para positions of the meso-Ph groups does not significantly affect the spin-Hamiltonian parameters that describe the metal center in each case. Collectively, these observations suggest that the highest-occupied (HOMO) and lowest-unoccupied MOs (LUMO) of the octaethioporphyrins involve the porphyrin π -ring system as is the case with the nonbrominated derivs. Studies were carried out to probe the electronic structures of these systems by three different approaches involving spectral and redox potential data as well as AM1 calcn. The electron-withdrawing β -bromo substituents stabilize the LUMO and, to a lesser degree, the HOMO and the extent of these changes can be fine-tuned, in a subtle way, by substitution on the meso-aryl rings of a given porphyrin.

IT 131214-46-3
 RI: FRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
 (electronic structure and electrochem. redox of)
 RN 131214-46-3 CAILUS
 CN 21M,22M-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)



IT 192423-39-49 192423-39-49

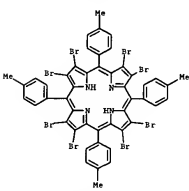
L6 ANSWER 100 OF 148 CAILUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1996:128059 CAILUS
 DOCUMENT NUMBER: 125:179700
 TITLE: Synthesis and electrochemistry of 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(3,5-dichloro-2,6-dimethoxyphenyl)porphyrin (H2tdmcp) and [M(tdmpcp)] (M = Fe(II) or Mn(II))
 AUTHOR(S): Autret, Marie-G, Zhouping Antoni, Alexandru Borchi, Tristram Tapilata, Paixro Kadiah, Karl M. Dep. Chem., Univ. Houston, Houston, TX, 77204-5641, USA
 SOURCE: Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1996), (13), 2793-2797
 CODEN: JCDTBI ISSN: 0300-9246
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Four new highly chlorinated porphyrins, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(3,5-dichloro-2,6-dimethoxyphenyl)porphyrin (H2tdmcp), [Co(tdmpcp)] (M = Fe(II) or Mn(II)) were prepared. The free base was synthesized by chlorination of H2tdmp (5,10,15,20-tetrakis(2,6-dimethoxyphenyl)porphyrin) and metalated to give the complex. All compounds were prepared and all eight synthesized compds. were electrochem. studied in benzonitrile or pyridine containing 0.1 mol dm⁻³ NBu₄ClO₄. As expected the half-wave potentials of the tdmpcp complexes are shifted towards pos. values while those for oxidation or reduction of the tdmp species are shifted neg., as compared with E1/2 for oxidation or reduction.

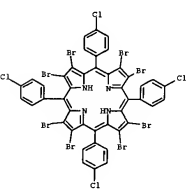
tdmpcp complexes having the same central metal ions. The magnitude of the anodic shifts in E1/2 for reduction with respect to TPP is among the largest reported for chlorinated porphyrin and ranges between 850 and 650 mV depending upon the specific redox reaction and solvent. A smaller AE1/2 of 330-400 mV is seen for oxidation of the same compd. and these values can be compared to a negligible shift in E1/2 upon going from planar M(tpcp) to distorted M(tdmpcp) (tdmpcp = 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(2,6-dimethoxyphenyl)porphyrin) complexes of cobalt and iron where the effect of macrocycle ruffling is known to predominate over the electronic effects of added halide substituents. The core distortion cannot compensate totally for the electron-withdrawing effect of the Cl substituents. The macrocyclic distortion also induces a large red shift of the UV/visible absorption bands and this shift in λ_{max} ranges up to 46 nm for the chlorinated compds. with respect to the tdmp compds.

IT 180711-85-TP, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(3,5-dichloro-2,6-dimethoxyphenyl)porphyrin
 RI: FRP (Properties); RCT (Reactant); SPN (Synthetic preparation); FRP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with transition metal salts and elec. oxidation and reduction potentials of)
 RN 180711-85-TP CAILUS
 CN 21M,22M-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(3,5-dichloro-2,6-dimethoxyphenyl)- (SCI) (CA INDEX NAME)

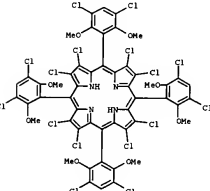
L6 ANSWER 99 OF 148 CAILUS COPYRIGHT 2005 ACS ON STN (Continued)
 RI: FRP (Properties); RCT (Reactant); SPN (Synthetic preparation); FRP (Preparation); RACT (Reactant or reagent)
 (prepn., complexation with copper or zinc, electronic structure and electrochem. redox of)
 RN 182423-39-4 CAILUS
 CN 21M,22M-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(4-methylphenyl)- (SCI) (CA INDEX NAME)



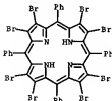
RN 182423-39-4 CAILUS
 CN 21M,22M-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(4-chlorophenyl)- (SCI) (CA INDEX NAME)



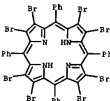
L6 ANSWER 100 OF 148 CAILUS COPYRIGHT 2005 ACS ON STN (Continued)



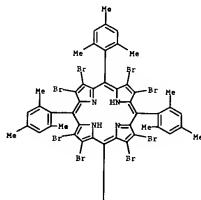
L6 ANSWER 101 of 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1596:396653 CAPLUS
 DOCUMENT NUMBER: 125:195272
 TITLE: Manifestation of structural features of porphyrin molecules in their electron absorption spectra
 AUTHOR(S): Berezin, B. B.; Andrianov, V. G.; Semakina, A. S.; Ivanovskaya Gonsudarstvennaya Khimiko-Tekhnologicheskaya Akademiya, Ivanovo, 153460, Russia
 SOURCE: Optika i Spektroskopiya (1996), 40(4), 618-626
 CORDR: CPSTAN; ISSN: 0030-4034
 PUBLISHER: Naukova Dumka
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The suggested earlier hypothesis on the nature of the intense absorption band at 350-450 nm is discussed. This band may be caused by a photoinduced transfer of the electron d. from the pyrrole rings to the macrocyclic system. For porphyrins and their azo derivs. the information available from the value of the long-wave absorption band shift under protonation of the compoe. is analyzed.
 IT 131214-86-3P
 RI: PRP (Properties); SYN (Synthetic preparation); PREP (Preparation) (Preparation and electronic structure of porphyrins by UV)
 RN 131214-86-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (9CI) (CA INDEX NAME)



L6 ANSWER 102 of 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1596:396509 CAPLUS
 DOCUMENT NUMBER: 125:25070
 TITLE: Optochemical HCl and Cl2 gas detection based on tetraphenylporphine dispersed in ethyl-cellulose
 AUTHOR(S): Tashitenta, Pietro; Sadaoka, Toshikiko; Sakai, Yoshiro
 CORPORATE SOURCE: Dip. Sci. Tecnologie Chim., Univ. degli Roma, Tor Vergata, 00173, Italy
 SOURCE: Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals (1996), 278, 173-180
 CORDR: MCLZEV; ISSN: 1058-723X
 PUBLISHER: Gordon & Breach
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB To detect sub-ppm levels of HCl gas, spectral changes of tetraphenylporphine and derivs. dispersed in ethylcellulose were examined in the visible region. For free base tetraphenylporphyrin, the absorbance at 450 nm and 670 nm is sensitive to sub-ppm levels of HCl and also a good reversibility is observed at room temperature. The Soret and Q-bands are insensitive to H2O, Cl2, NO2 and NO at room temperature. For zinc tetra(ortho)tetraphenylporphine, the absorbance at 479 nm and 722 nm is sensitive to sub-ppm levels of HCl gas and also good reversibility is observed at room temperature.
 IT 131214-86-3
 RI: PRP (Properties)
 RN 131214-86-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (9CI) (CA INDEX NAME)



L6 ANSWER 103 of 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1596:350273 CAPLUS
 DOCUMENT NUMBER: 124:342946
 TITLE: Syntheses of β -Mono-, Tetra-, and Octasubstituted Sterically Bulky Porphyrins via Suzuki Cross Coupling
 AUTHOR(S): Zhou, Jiang; Yue, Han; Kan, Wan, Terence S. M.; Chan, Kin Shing
 CORPORATE SOURCE: Departments of Chemistry, Chinese University of Hong Kong, Shatin, Hong Kong
 SOURCE: Journal of Organic Chemistry (1996), 61(11), 3590-3593
 CORDR: JOCJAN; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB β -Mono-, tetra-, and octa-substituted tetramethylporphyrins were prepared in good yields by Suzuki cross-coupling reactions of β -bromotetramethylporphyrins with aryl- and alkylboronic acids.
 IT 120006-48-0P
 RI: RCT (Reactant); SYN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 RN 120006-48-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



PAGE 1-A

L6 ANSWER 103 of 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A



L6 ANSWER 104 OF 148 CAPJUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1996:271551 CAPJUS
 DOCUMENT NUMBER: 124:316876
 TITLE: Haloporphyrins and their preparation
 INVENTOR(S): Ellis, Paul E., Jr.; Lyons, James E.
 PATENT ACCESSION(S): Sun Company, Inc. (Bain), USA
 SOURCE: Bur. Pat. Appl., 8 pp.
 CODES: EPXOEN
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 11
 PATENT INFORMATION:

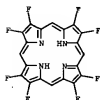
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 700915	A1	19960313	EP 1995-306230	19950906
RU, DE, GB, FR, CN, JP, US	GR, 17, 19			
CA 2157241	AA	19960308	CA 1995-2157241	19950830
JP 08113578	A2	19960507	JP 1995-254892	19950907
US 5463328	A	19970902	US 1996-672302	19960627
PRIORITY APPLN. INFO.:				
			US 1994-303106	A 19940907
			US 1987-246	A2 19870102
			US 1987-68666	A2 19870626
			US 1989-420089	B2 19891023
			US 1990-588116	A2 19900816

OTHER SOURCE(S): MABPAT 124:316876
 AB The invention provides novel catalyst compns., useful in the oxidation of hydrocarbons with air or oxygen to form hydroxy-group containing compds. and in the decomposition of hydroperoxides to form hydroxy-group containing compds.

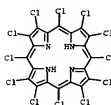
The catalysts comprise transition metal complexes of a porphyrin ring having 1 to 12 halogen substituents on the porphyrin ring, at least one of said halogens being in a meso position and/or the catalyst containing no aryl group in a meso position. The compns. are prepared by halogenating a transition metal complex of a porphyrin. Thus, Cu porphyrin was chlorinated with Cl₂ in CCl₄ to give the dodecachloroderiv. which was demetalated and then remetalated to give iron meso-tetrachloro-B- octachloroporphyrin chloride (II). I was used as a catalyst in the oxidation of isobutane to give isobutyronitrile and in the decomposition of Me₂COOH to Me₂CO.

IT 14481-82-5P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of perhaloporphyrin complexes as oxidation catalysts)
 RN 14481-82-5 CAPJUS
 CN 215-23H-Porphine, 2,3,5,7,8,10,12,13,15,17,18,20-dodecachloro- (DCT) (CA INDEX NAME)

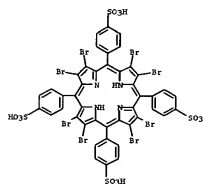
L6 ANSWER 105 OF 148 CAPJUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1996:247527 CAPJUS
 DOCUMENT NUMBER: 124:342544
 TITLE: So route to 2,3,7,8,12,13,17,18-octafluoroporphyrin
 AUTHOR(S): Leroy, Jacques
 CORPORATE SOURCE: Ec. Normale Supérieure, Dep. Chimie, Paris, 75231, Fr.
 SOURCE: Electronic Conference on Trends in Organic Chemistry (CD-ROM) (1996), Meeting Date 1995, Paper 40.
 Editor(s): Repp, Henry S.; Leach, Christopher; Goodman, Jonathan M. Royal Society of Chemistry: Cambridge, UK
 CODES: 62FAB Conference
 DOCUMENT TYPE: Conference
 LANGUAGE: English
 AB A symposium report with 13 refs. on the preparation of fluoroporphyrins intermediates for octafluoroporphyrin.
 IT 14481-86-9P
 RI: FNU (Preparation, unclassified); PREP (Preparation)
 (preparation of intermediates for octafluoroporphyrin)
 RN 14481-86-9 CAPJUS
 CN 218-23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro- (SC1) (CA INDEX NAME)



L6 ANSWER 104 OF 148 CAPJUS COPYRIGHT 2005 ACS ON STN (Continued)

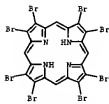


L6 ANSWER 106 OF 148 CAPJUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1996:192953 CAPJUS
 DOCUMENT NUMBER: 124:300666
 TITLE: Metalates of water-soluble octachloroporphyrin with lithium(I), cadmium(II), and mercury(II)
 AUTHOR(S): Tabata, Masaki; Nishimoto, Jun; Oyata, Akiko; Kawanou, Tokuo; Waler, Murun
 CORPORATE SOURCE: Dep. Chemistry, Saga Univ., Saga, 840, Japan
 SOURCE: Bulletin of the Chemical Society of Japan (1996), 69(3), 673-77
 CODES: BCJGAM ISSN: 0009-2673
 PUBLISHER: Nippon Kagakai
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A water soluble porphyrin, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(4-sulfonatophenyl)porphyrin (H2obppap⁴⁻, B2H4) was synthesized and the equilibrium constants were determined for the reaction of H2obppap⁴⁻ with Li, Cd, and Hg(II) at 25° in I = 0.1 mol dm⁻³ (NaNO₃). The protonation constants of H2obppap⁴⁻ were determined. The porphyrin reacted with Li(I) in alkaline aqueous solution to form LiP8⁻, for which formation constant was determined. Na and K ions did not form their complexes under the same exptl. conditions. The equilibrium constants for the formation of Cu(II) and Hg(II) porphyrins were determined. Hg(II) also forms binuclear porphyrin, Hg₂P for which the formation constant was determined. The octachloro groups lower the basicity of the porphyrin, which gave Li(I) porphyrin.
 IT 154783-90-0P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (complexation with cadmium and mercury and lithium)
 RN 154783-90-0 CAPJUS
 CN Benzenesulfonic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octachloro-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis- (SC1) (CA INDEX NAME)

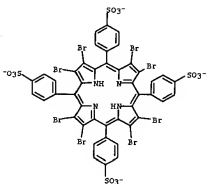


RI: FNU (Formation, unclassified); PREP (Properties); FORM (Formation,

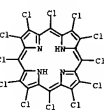
L6 ANSWER 106 OF 148 CAPLUS COPYRIGHT 2005 ACS ON SYN (Continued)
 nonpreparative)
 IT 144811-82-59 RCT (Reactant), SPN (Synthetic preparation), PREP (Preparation); RACT
 (Reactant or reagent)
 RU 144811-82-5 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo- (SCI) (CA INDEX NAME)



IT 176173-40-1 RLT PRE (Preparation)
 (protonation counts.)
 RU 176173-40-1 CAPLUS
 CN Bacteneisulfonic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetraakis-, ion(4-) (SCI) (CA INDEX NAME)

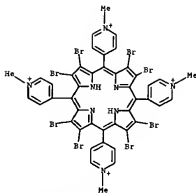


L6 ANSWER 107 OF 148 CAPLUS COPYRIGHT 2005 ACS ON SYN (Continued)
 IT 144811-82-59 RLT RCT (Reactant), SPN (Synthetic preparation), PREP (Preparation); RACT
 (Reactant or reagent)
 RU 144811-82-5 CAPLUS
 CN 21H,23H-Porphine, 2,3,5,7,8,10,12,13,15,17,18,20-dodecachloro- (SCI) (CA INDEX NAME)



L6 ANSWER 108 OF 148 CAPLUS COPYRIGHT 2005 ACS ON SYN
 ACCESSION NUMBER: 1996145243 CAPLUS
 DOCUMENT NUMBER: 124:316505
 TITLE: Catalytic oxidation of hydrocarbons and decomposition of hydroperoxides catalyzed by haloporphyrin metal complexes
 INVENTOR(S): Ellis, Paul E., Jr.; Lyons, James E.
 PATENT ASSIGNOR(S): Sun Co., Inc. (R and M), USA
 SOURCE: U.S., 8 pp. Cont.-part of U.S. Ser. No. 568,116.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 11
 PATENT INFORMATION:
 PATENT NO. KIND DATE APPLICATION NO. DATE
 US 5489716 A 19960206 US 1994-203105 19940907
 US 4895682 A 19900123 US 1987-246 19870102
 US 4500871 A 19900212 US 1987-66666 19870206
 CA 1336189 A1 19950704 CA 1987-553420 19870303
 US 5095491 A 19920303 US 1990-46663 19900117
 CA 2157238 A 19960308 CA 1993-215738 19930100
 EP 704447 A1 19940303 EP 1993-306231 19950906
 JP 08104558 A2 19960423 JP 1995-254493 19950907
 US 5663328 A 19970002 US 1996-072020 19960427
 US 1987-246 A2 19870102
 US 1987-66666 A2 19870206
 US 1990-568116 A2 19900616
 US 1989-425089 B2 19891023
 US 1994-203105 A 19940907
 US 1994-203106 A3 19940907
 OTHER SOURCE(S): CASREACT 124:316505 NADCAT 124:316505
 AB The invention provides novel methods for the oxidation of hydrocarbons with oxygen-containing gas to form hydroxy-group containing compounds and for the decomposition of hydroperoxides to form hydroxy-group containing compounds.
 The catalysts used in the methods of the invention comprise transition metal complexes of a porphyrin ring having 1 to 12 halogen substituents on the porphyrin ring, at least one of said halogens being in a meso position and/or the catalyst containing no aryl group in a meso position. The catalyst complex, are prepared by halogenating a transition metal complex of a porphyrin. In one embodiment, a complex of a porphyrin with a metal whose porphyrin complexes are not active for oxidation of alkanes is halogenated, thereby to obtain a haloporphyrin complex to obtain the free base form of the haloporphyrin, and a metal such as iron whose porphyrin complexes are active for oxidation of alkanes and for the decomposition of hydroperoxides is complexed with the free base to obtain an active catalyst for oxidation of alkanes and decomposition of alkyl hydroperoxides. Thus, partial oxidation of indutane with O2 catalyzed by iron complex of meso-tetrachloro- β -octachloroporphyrin (preparation given) afforded tert-Bu alc. as main product.
 Decomposition of tert-Bu hydroperoxide in tert-Bu alc. catalyzed by iron complex of meso-tetrachloro- β -octachloroporphyrin afforded tert-Bu alc.
 L6 ANSWER 109 OF 148 CAPLUS COPYRIGHT 2005 ACS ON SYN
 ACCESSION NUMBER: 1996145243 CAPLUS
 DOCUMENT NUMBER: 124:316510
 TITLE: Observation of a Stable Water-Soluble Lithium Porphyrin
 AUTHOR(S): Richards, Rosalie A.; Hammons, Kelly Jo; Melanice, Mackelly, Gordon H.
 CORPORATE SOURCE: Department of Chemistry, University of Southern California, Los Angeles, CA, 90089-0744, USA
 SOURCE: Inorganic Chemistry (1996), 35(7), 1940-4
 CODEN: INCHAC 1996: 0020-1669
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The deprotonated form of the water-soluble porphyrin 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(N-methylpyridinium-4-yl)porphyrin, LiHOBT(4-N-MePy)P4-, has a strong affinity for Li+ and forms a stable Li+ complex in basic aqueous solution. The fully deprotonated form, OBT(4-N-MePy)P2-, is present above pH 10 (pKa = 6.5 \pm 0.1 and pKa2 = 10.2 \pm 0.1). Li+ ions bind to this porphyrin in aqueous solution in a 1:1 stoichiometry with a binding constant of (9.6 \pm 0.5) \times 102 M-1 (0.1M KCl, 298 K). The apparent binding constant for Li+ is reduced in the presence of a large excess of Na+, and a binding constant for Na+ of 1.0 \pm 0.3 M-1 was obtained. The Li+ porphyrin in D2O shows a 7Li NMR signal at -10.25 ppm vs. 1.3M LiCl, and the line widths show exchange occurs at 299 K, in contrast to earlier Li+ porphyrins, which exchange more slowly. The Li+-binding behavior and 7Li NMR spectra for 5,10,15,20-tetrakis(N-methylpyridinium-4-yl)porphyrin, LiH(4-N-MePy)P(2a-) (n = 0-2) are also reported.
 IT 174580-25-78 174580-27-89 RLT PRE (Physical, engineering or chemical process); PREP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
 RU 174580-25-7 CAPLUS
 CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetraakis-1-methyl- (SCI) (CA INDEX NAME)

L6 ANSWER 107 OF 148 CAPLUS COPYRIGHT 2005 ACS ON SYN
 ACCESSION NUMBER: 1996145243 CAPLUS
 DOCUMENT NUMBER: 124:316505
 TITLE: Catalytic oxidation of hydrocarbons and decomposition of hydroperoxides catalyzed by haloporphyrin metal complexes
 INVENTOR(S): Ellis, Paul E., Jr.; Lyons, James E.
 PATENT ASSIGNOR(S): Sun Co., Inc. (R and M), USA
 SOURCE: U.S., 8 pp. Cont.-part of U.S. Ser. No. 568,116.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 11
 PATENT INFORMATION:
 PATENT NO. KIND DATE APPLICATION NO. DATE
 US 5489716 A 19960206 US 1994-203105 19940907
 US 4895682 A 19900123 US 1987-246 19870102
 US 4500871 A 19900212 US 1987-66666 19870206
 CA 1336189 A1 19950704 CA 1987-553420 19870303
 US 5095491 A 19920303 US 1990-46663 19900117
 CA 2157238 A 19960308 CA 1993-215738 19930100
 EP 704447 A1 19940303 EP 1993-306231 19950906
 JP 08104558 A2 19960423 JP 1995-254493 19950907
 US 5663328 A 19970002 US 1996-072020 19960427
 US 1987-246 A2 19870102
 US 1987-66666 A2 19870206
 US 1990-568116 A2 19900616
 US 1989-425089 B2 19891023
 US 1994-203105 A 19940907
 US 1994-203106 A3 19940907
 OTHER SOURCE(S): CASREACT 124:316505 NADCAT 124:316505
 AB The invention provides novel methods for the oxidation of hydrocarbons with oxygen-containing gas to form hydroxy-group containing compounds and for the decomposition of hydroperoxides to form hydroxy-group containing compounds.
 The catalysts used in the methods of the invention comprise transition metal complexes of a porphyrin ring having 1 to 12 halogen substituents on the porphyrin ring, at least one of said halogens being in a meso position and/or the catalyst containing no aryl group in a meso position. The catalyst complex, are prepared by halogenating a transition metal complex of a porphyrin. In one embodiment, a complex of a porphyrin with a metal whose porphyrin complexes are not active for oxidation of alkanes is halogenated, thereby to obtain a haloporphyrin complex to obtain the free base form of the haloporphyrin, and a metal such as iron whose porphyrin complexes are active for oxidation of alkanes and for the decomposition of hydroperoxides is complexed with the free base to obtain an active catalyst for oxidation of alkanes and decomposition of alkyl hydroperoxides. Thus, partial oxidation of indutane with O2 catalyzed by iron complex of meso-tetrachloro- β -octachloroporphyrin (preparation given) afforded tert-Bu alc. as main product.
 Decomposition of tert-Bu hydroperoxide in tert-Bu alc. catalyzed by iron complex of meso-tetrachloro- β -octachloroporphyrin afforded tert-Bu alc.
 L6 ANSWER 108 OF 148 CAPLUS COPYRIGHT 2005 ACS ON SYN
 ACCESSION NUMBER: 1996145243 CAPLUS
 DOCUMENT NUMBER: 124:316510
 TITLE: Observation of a Stable Water-Soluble Lithium Porphyrin
 AUTHOR(S): Richards, Rosalie A.; Hammons, Kelly Jo; Melanice, Mackelly, Gordon H.
 CORPORATE SOURCE: Department of Chemistry, University of Southern California, Los Angeles, CA, 90089-0744, USA
 SOURCE: Inorganic Chemistry (1996), 35(7), 1940-4
 CODEN: INCHAC 1996: 0020-1669
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The deprotonated form of the water-soluble porphyrin 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(N-methylpyridinium-4-yl)porphyrin, LiHOBT(4-N-MePy)P4-, has a strong affinity for Li+ and forms a stable Li+ complex in basic aqueous solution. The fully deprotonated form, OBT(4-N-MePy)P2-, is present above pH 10 (pKa = 6.5 \pm 0.1 and pKa2 = 10.2 \pm 0.1). Li+ ions bind to this porphyrin in aqueous solution in a 1:1 stoichiometry with a binding constant of (9.6 \pm 0.5) \times 102 M-1 (0.1M KCl, 298 K). The apparent binding constant for Li+ is reduced in the presence of a large excess of Na+, and a binding constant for Na+ of 1.0 \pm 0.3 M-1 was obtained. The Li+ porphyrin in D2O shows a 7Li NMR signal at -10.25 ppm vs. 1.3M LiCl, and the line widths show exchange occurs at 299 K, in contrast to earlier Li+ porphyrins, which exchange more slowly. The Li+-binding behavior and 7Li NMR spectra for 5,10,15,20-tetrakis(N-methylpyridinium-4-yl)porphyrin, LiH(4-N-MePy)P(2a-) (n = 0-2) are also reported.
 IT 174580-25-78 174580-27-89 RLT PRE (Physical, engineering or chemical process); PREP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
 RU 174580-25-7 CAPLUS
 CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetraakis-1-methyl- (SCI) (CA INDEX NAME)



RN 174580-27-9 CAPLUS
CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[1-methyl-, tetrakis(henaofluorophosphate(1-))], mono(henaofluorophosphate(1-)) (CC1) (CA INDEX NAME)

CM 1

CNM 16940-81-1

CHP P6 P . H

CCI CCS



● H⁺

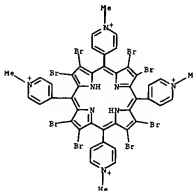
CM 2

CNM 174580-26-8

CHP C44 H30 Br8 N9 . 4 P6 P

CM 3

CNM 174580-25-7



CM 4

CNM 16919-81-9

CHP P6 P

CCI CCS



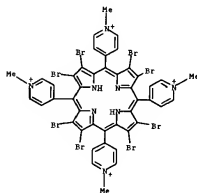
IT 174580-23-7P

RI: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 174580-31-7 CAPLUS

CN Pyridinium, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[1-methyl-, tetrachloride (9CI) (CA INDEX NAME)



● Cl⁻

ACCESSION NUMBER: 1996:25316 CAPLUS

DOCUMENT NUMBER: 124101510

TITLE: Energy Transfer and Electron Transfer of Poly(ethylene glycol)-linked Fluorinated Porphyrin Derivatives in Lipid Bilayers

AUTHOR(S):

Nagao, Naomasa; Iida, Kouji; Matsumoto, Wataru; Yamaguchi, Masashi; Sato, Kyohito; Tanaka, Kazumasa; Akimoto, Ayoko; Tanashita, Keiji; Tsuda, Kazuichi; Kurono, Yukihisa

CORPORATE SOURCE: Department of Applied Chemistry, Nagoya Institute of Technology, Gokiso, 466, Japan

SOURCE: Langmuir (1996), 12(2), 450-8

CODING LANGUAGE: ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Poly(ethylene glycol) [PEG]-linked porphyrin derivs. separated by spacer methylene groups (Ca), PEG-Cu-MPFPF (M = H2, Me; n = 0, 5, 11), PEG-Cl-MTTP (M = H2, Me), and PEG-Cu-MPFPFes (M = H2, Me) were synthesized. The porphyrin portion of the poly(ethylene glycol) [PEG]-linked fluorinated porphyrin derivative has been anchored onto a lipid bilayer. PEG-linked fluorinated porphyrins easily associated with phospholipid bilayers and are chemical stable against oxidants such as H2O2. An efficient energy transfer from phospholipid-linked zinc porphyrin, PEG-Cl-MTTP, to externally added PEG-Cu-MPFPF (n = 0, 5, 11) in the lipid bilayer was observed, depending on the length of Ca and the porphyrin structure. Ground state transmembrane electron transfer catalyzed by PEG-Cu-MPFPF (n = 0, 5, 11) and PEG-Cl-MTTP revealed that the porphyrin carries a significant accelerated electron transfer especially when n = 11. Comparison of PEG-Cl-MPFPF and PEG-Cl-MTTP-catalyzed electron transfer is made. The electron transfer rate was controlled not only by the separated spacer methylene groups between the porphyrin and PEG moieties but also by the structures of porphyrins.

IT

RI: RCT (Reactants); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactants or reagent)

(in preparation of poly(ethylene glycol)-linked fluorinated porphyrin

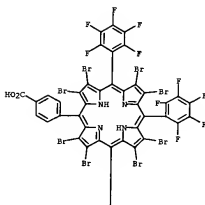
derivs.)

RN 172663-37-5 CAPLUS

CN Benzoic acid, 4-[(2,3,7,8,12,13,17,18-octabromo-10,15,20-

tris(pentafluorophenyl)-21H,23H-porphin-5-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

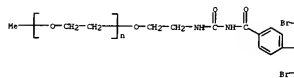


PAGE 2-A

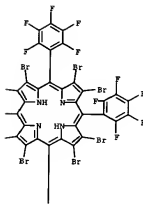


IT 172663-31-98
 RI: FEP (Physical, engineering or chemical process); SFN (Synthetic preparation); PNE (Preparation); PNEC (Process).
 [photoreduced assay; and electron-transfer of polyethylene glycol-linked fluorinated porphyrin deriva. in lipid bilayers]
 RN 172663-31-9 CAPLUS
 CN Poly[ny-1,2-ethanediyl, α-methyl-α-[2-[[[4-(2,3,5,7,8,12,13,17,18-octabromo-10,16,20-tetrakis(pentafluorophenyl)-21H, 23H-porphin-5-yl]benzoyl)amino]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



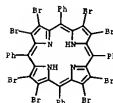
PAGE 1-B



PAGE 2-B

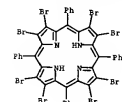


L6 ANSWER 110 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1595:01155 CAPLUS
 DOCUMENT NUMBER: 123:305038
 TITLE: Synthesis and spectroscopic studies of lanthanide monoporphyrrinates with meso-tetra-aryl porphyrinate bearing bromines on the β-pyrrole positions and fluorines on phenyl groups
 AUTHOR (S): Spyroullas, G. A.; Contoulalos, A. G.
 CORPORATE SOURCE: Chemistry Dep., Univ. Crete, Crete, 71409, Greece
 SOURCE: Polyhedron (1995), 14(17/18), 2457-50
 CODING: FLYNDE: ISSN: 0277-5387
 PUBLISHER: Elsevier
 JOURNAL: Journal
 DOCUMENT TYPE: English
 LANGUAGE: English
 AB The metal derivs. of octabromotetraphenylporphyrin (H2Obp) with lanthanide (Eu to Lu) ions were synthesized via the acetylacetonate and characterized by UV-visible, IR and ESR spectroscopies. These lanthanide complexes exhibit interesting electronic features compared with all the previously reported lanthanide monoporphyrrinates. The stability of the complexes is discussed in terms of the already known related complexes. The meso-pentafluorophenyl-substituted porphyrin with H2O1 was synthesized and its spectroscopic behavior compared with the above β-pyrrole octabromotetraphenyl complexes. IR studies indicate that the axial ligand is the acetylacetonate as was observed for lanthanide monoporphyrrinates synthesized by the acetylacetonate method. ESR spectroscopy of Ln(Obp)acac exhibit one intense peak with a approx. 2.00 and hyperfine splitting for Ln = Sm, Eu, Tb, Dy, Ho, Er, Tm, Yb, Lu. The ESR spectrum of 6d(Obp)acac exhibits an isotropic g-factor with a value of 2.3059 and it compared with the analogous complex of 6d(tpp)acac.
 IT 151514-46-3 CAPLUS
 RI: RCT (Reactant); SFN (Synthetic preparation); FEP (Preparation); RACT (Reactant or reagent)
 (For preparation of rare earth meso-tetra-phenyl-octabromoporphyrrinate complexes)
 RN 111214-46-3 CAPLUS
 CN 21H, 23H-porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetra-phenyl- (9CI) (CA INDEX NAME)



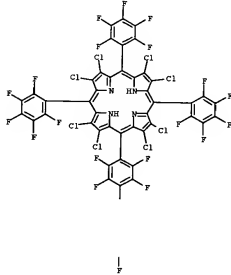
16 ANSWER 111 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1995:718516 CAPLUS
 DOCUMENT NUMBER: 123:111720
 TITLE: Fast atom bombardment mass spectral observations on
p-pyrrole-substituted tetraphenylporphyrins
 AUTHOR(S): Sotchi, Tristano D'Arconello, Giuseppe Tagliatesta,
 Pietro
 CORPORATE SOURCE: Dep. di Scienze e Technologie Chimiche, Univ. degli
 Studi di Rome Tor Vergata, Rome, 00133, Italy
 SOURCE: Journal of Chemical Research, Synopses (1995), (8),
 326-7
 PUBLISHER: CODEN: JCRDPC; ISSN: 0308-2342
 DOCUMENT TYPE: Royal Society of Chemistry
 LANGUAGE: English
 AB The FAB mass spectra of brominated porphyrins have been measured using
 different matrices and the fragmentation patterns related to the acidity
 of the media.

IT 123124-46-3
 RI: FRP (Properties)
 (Fast atom bombardment mass spectral observations on
p-pyrrole-substituted tetraphenylporphyrins)
 NN 123124-46-3 CAPLUS
 CN 218,238-Porphine, 2,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl-
 (9CI) (CA INDEX NAME)



16 ANSWER 112 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

PAGE 1-A



PAGE 2-A

16 ANSWER 112 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1995:716064 CAPLUS
 DOCUMENT NUMBER: 123:338859
 TITLE: Halogenated metalloporphyrin complexes as catalysts
 for selective reactions of acyclic alkenes with
 molecular oxygen
 AUTHOR(S): Lyons, James E., Jills, Paul E., Jr., Myers, Harry K.,
 Jr.
 CORPORATE SOURCE: Research and Developmental Department, Sun Company,
 Inc., Harcum Hook, PA, 19061-0935, USA
 SOURCE: Journal of Catalysis (1995), 155(1), 59-73
 CODEN: JCTCAT; ISSN: 0021-9517
 PUBLISHER: Academic
 DOCUMENT TYPE: English
 LANGUAGE: English
 ABSTRACT: 123:338859

WE have shown that halogenation of the porphyrin ring of a
 metalloporphyrin complex can convert a catalytically inactive material
 into an exceptionally active catalyst for the selective reaction of an
 alkene with mol. oxygen. The greater the halogenation of the
 ring, the greater is the catalytic activity of the metal complex. The
 product profile, while characteristic of radical reactions, is sensitive to
 the nature of the metal center. Iron complexes are generally more
 active than those of cobalt, manganese, or chromium. The activity of iron
 complexes is directly related to the Fe(III)/Fe(II) redox potential of the
 porphyrin complex. There is also a similar correlation between the
 Fe(III)/Fe(II) reduction potential and the rate at which iron haloporphyrin
 complexes decompose alkyl hydroperoxides. These iron perhaloporphyrin
 complexes are not only the most active known liquid phase alkene
 air-oxidation catalysts, they are also the most active hydroperoxide decomposition
 catalysts known to date. The nature of the products formed is dependent on the
 structure of the aliphatic substrate that is oxidized and can be
 rationalized by a catalytic pathway that very efficiently generates alkyl and alkoxy
 radicals at low temp. The relationship between the electrochem.
 properties of these complexes and the rates of alkene oxidation and
 hydroperoxide decomposition lends insight into possible mechanisms of
 catalytic activity.

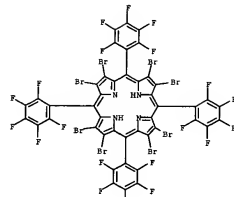
IT 161405-46-39
 RI: RCT (Reactant) SWP (Synthetic preparation); FRP (Preparation); RACT
 (Reactant or reagent)
 (Halogenated metalloporphyrin complexes as catalysts for alkene oxidation
 or alkyl hydroperoxide decomposition)
 NN 161405-46-3 CAPLUS
 CN 218,238-Porphine, 2,7,8,12,13,17,18-octachloro-5,10,15,20-
 tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

16 ANSWER 113 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1995:629765 CAPLUS
 DOCUMENT NUMBER: 123:184949
 TITLE: 19F NMR Spectra and Structures of Halogenated
 Porphyrins
 AUTHOR(S): Birnbaum, Eva R.; Hodge, Julia A.; Grinstaff, Hark W.,
 Schaefer, William F.; Heeling, Lawrence; Lahinger, Jay
 A.; Barczak, John E.; Gray, Harry B.
 CORPORATE SOURCE: Arthur Amos Noyes Laboratory, California Institute of
 Technology, Pasadena, CA, 91125, USA
 SOURCE: Inorganic Chemistry (1995), 34(14), 3625-32
 CODEN: INOCCH; ISSN: 0020-1669
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: English
 LANGUAGE: English

AB Fluorine-19 NMR spectra of a series of halogenated porphyrins have been
 used to create a spectral library of different types of fluorine splitting
 patterns for tetrakis(pentafluorophenyl) porphyrins (TPFP) complexed with
 diamagnetic and paramagnetic metal ions. The paramagnetic shift, line
 broadening, and fine structure of the resonances from the peripheral
 pentafluorophenyl rings are dependent on the symmetry and core environment
 of the porphyrin macrocycles. In combination with crystal structure data,
 19F NMR helps define the behavior of halogenated porphyrins and core
 new crystal structures for TPFP and octafluoro-TPFP derivatives. Are reported:
 HETFP in rhombohedral space group R.hv.in.3, a = 20.327(4) Å, c =
 24.368(5) Å, V = 8720(3) Å³, Z = 9; 2ETFP in monoclinic space
 group P21/c, a = 12.650(4) Å, b = 11.883(5) Å, c = 15.261(2) Å,
 β = 103.87(2)°, V = 2227.6(13) Å³, Z = 9; 4ETFP in
 rhombohedral space group R.hv.in.3, a = 20.358(5), c = 24.347(6) Å, V =
 8729(4) Å³, Z = 9; HETFPF18 in triclinic space group P.hv.in.1, a =
 11.066(1) Å, b = 14.641(3) Å, c = 14.678(2) Å, α =
 84.97(1)°, β = 76.50(1)°, γ = 71.29(1)°, V =
 2181.4(6) Å³, Z = 2; 2-ETFPF18 in tetragonal space group P.hv.in.42/c,
 a = 15.502(20), c = 16.916(8) Å, V = 4152(6) Å³; HETFPF18 in
 monoclinic space group C2, a = 27.634(6) Å, b = 6.936(2) Å, c =
 14.844(3) Å, β = 109.64(2)°, V = 2675.8(11) Å³, Z = 2.

IT 189844-26-46 161405-46-39
 RI: FRP (Properties); SWP (Synthetic preparation); FRP (Preparation)
 (19F NMR spectra and structures of halogenated porphyrins)
 NN 189844-26-6 CAPLUS
 CN 218,238-Porphine, 2,7,8,12,13,17,18-octachloro-5,10,15,20-
 tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

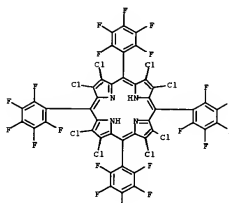


PAGE 2-A

↓

RN 161405-60-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-
 tetrakis(pentafluorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

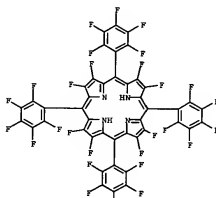


PAGE 2-A

↓

L6 ANSWER 114 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STM (Continued)
 ACCESSION NUMBER: 122:290548
 DOCUMENT NUMBER: 122:290548
 TITLE: Substituent Effects on Valence Ionization Potentials
 of Free Base Porphyrins: A Local Density Functional
 Study
 AUTHOR(S): Ghosh, Abhik
 CORPORATE SOURCE: Department of Chemistry, University of Minnesota,
 Minneapolis, MN, 55455, USA
 SOURCE: Journal of the American Chemical Society (1995),
 117(16), 4691-9
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AD Local d. functional (LDF) orbitals, with polarized double- ζ basis sets
 have been used to calculate the two lowest one-electron ionization
 potentials
 (IPs) of a variety of free base porphyrins with multiple alkyl, aryl,
 fluoro, chloro, bromo, trifluoromethyl, cyano, and nitro substituents.
 For unsubstituted porphyrin (PH2), β -octaalkylporphyrins, and
 β -octaalkylporphyrin (TPFH2), LDF-ASCT orbitals. reproduce the
 lowest UV photoelectron spectral (UPS) IPs to within \sim 0.2 eV. The
 two lowest one-electron IPs of TPFH2 are predicted to be lower than those
 of PH2 by \sim 0.5 eV, in agreement with UPS expts. An earlier
 Mattheis-Fock (MF) theory seriously underestimates this electronic effect
 of β -octaalkyl substitution. Both LDF and HF theories predict that
 substituents on the β h rings of TPFH2 should strongly affect the lowest
 one-electron IPs of TPFH2. Substitution of the para positions of the β h
 groups of TPFH2 with $-CF_3$, $-CN$, or $-NO_2$ substituents should raise the
 lowest IP by 0.7-0.9 eV, while perfluorination of the β h rings should
 increase the lowest IP by \sim 0.25 eV. A comparison of the IPs of
 ortho-, meta-, and para-fluorinated TPFH2 derivs. suggests that
 electron-withdrawing substituents at meta and para positions should exert
 significantly stronger electronic effects on the porphyrin ring than ortho
 substituents. An earlier HF theory seriously overestimates the
 electron-withdrawing effect of peripheral halogen substituents. Provided
 higher electronic effects than the electronic effect of β -octaalkylation
 peripheral substituents, LDF theory predicts that β -octaalkylation
 with F, Cl, or Br should have almost no influence on the lowest IP of
 PH2, while β -octachlorination or octabromination should increase the
 lowest IP by \sim 0.4-0.5 eV. Electrochem. measurements support these
 LDF predictions. β -octachlorination is predicted to exert an
 electronic effect of \sim 0.85 eV on the lowest IPs of PH2, which is
 significantly larger than the electronic effect of β -octachlorination
 or octabromination. Substituents such as $-CF_3$, $-CN$, and $-NO_2$ exert far
 predicts that the lowest IP of β -octaalkylporphyrins should be
 should exceed that of TPFH2 by \sim 0.7 eV and that of
 β -octaalkylporphyrins (TPFH2) by \sim 0.6 eV. Unlike the
 halogen, β -octacyano-substitution with cyano groups should drastically
 increase the lowest IP of PH2 by \sim 0.9-1.1 eV, depending on the
 conformation of the nitro groups. In general, β -octaalkyl substituents exert
 stronger electronic effects than the same substituents placed at
 β -positions
 144811-83-6, Octachloroporphine
 144811-83-6, Octachloroporphine 144811-84-9,
 Octachloroporphine

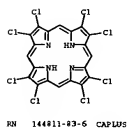
PAGE 1-A



PAGE 2-A

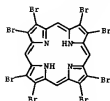
↓

RN 144811-81-4 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro- (9CI) (CA INDEX NAME)

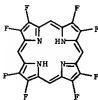


RN 144811-83-6 CAPLUS

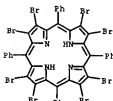
L6 ANSWER 114 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo- (SCI) (CA INDEX NAME)



RN 144811-86-9 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro- (SCI) (CA INDEX NAME)

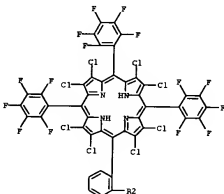


L6 ANSWER 115 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 15851476115 CAPLUS
DOCUMENT NUMBER: 122:290549
TITLE: Synthesis of beta-aryl substituted porphyrins by palladium catalyzed Suzuki cross-coupling reactions
AUTHOR(S): Chen, Min Sheng; Zhou, Xiang; Au, Ping Tak; Tan, Chak Yee
CORPORATE SOURCE: Department of Chemistry, The Chinese Univ. of Hong Kong, Shatin, Hong Kong
SOURCE: Tetrahedron (1995), 51(11), 3129-36
CODEN: TETRAH 155H; 0040-4020
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 122:290549
AB P-Bromoporphyrins undergo Suzuki cross coupling reactions with aryl boronic acids p-X-C6H4(OH)2 (X = H, Me, MeO, Me3, Cl) to give P-arylporphyrins in high yields.
IT 131214-86-3
R1: RCF (Reactant); RACT (Reactant or reagent)
(Preparation of P-arylporphyrins by palladium-catalyzed Suzuki cross-coupling with arylboronic acids)
RN 131214-86-3 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (PCI) (CA INDEX NAME)



L6 ANSWER 116 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 15851465603 CAPLUS
DOCUMENT NUMBER: 122:223871
TITLE: Metal complexes of substituted gable porphyrins as oxidation catalysts.
INVENTOR(S): Lyons, James E.; Ellis, Paul E., Jr.; Wapner, Richard W.
PATENT ASSIGNEE(S): Sun Co., Inc., USA
SOURCE: Bur. Pat. Appl., 8 PP.
CODEN: EPXODW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 636628	A1	19950201	EP 1994-305634	19940729
US 5480856	R1	BE, DE, FR, GB, IT, NL		
CA 2129055	AA	19950102	US 1993-100516	19930730
JP 07089564	A2	19950131	CA 1994-2129055	19940728
PRIORITY AFFIL. INFO.:			JP 1994-197953	19940729
OTHER SOURCE(S):			US 1993-100516	A 19930730
AB	Transition metal complexes of gable porphyrins having two porphyrin rings connected through a linking group, and having on the porphyrin rings electron-withdrawing groups, such as halogen, nitro or cyano, are useful as catalysts for the oxidation of organic compounds, e.g. alkanes.			
IT 142023-89-48	R1: CAT (Catalyst use); SEP (Synthetic preparation); PREP (Preparation); USES (Uses)			
RN 162023-89-48 CAPLUS	(metal complexes of substituted gable porphyrins as oxidation catalysts)			
CN 21H,23H-Porphine, 5,5'-(1,2-phenylene)bis[2,3,7,8,12,13,17,18-octachloro-10,15,20-tris(pentafluorophenyl)- (SCI) (CA INDEX NAME)				

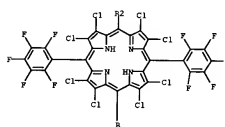


PAGE 1-A

L6 ANSWER 116 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)



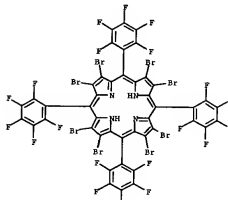
PAGE 2-A



PAGE 3-A

L6 ANSWER 117 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:449372 CAPLUS
DOCUMENT NUMBER: 122:20372
TITLE: Electronic Structures of Halogenated Ruthenium Porphyrins. Crystal Structure of RuTPPFC18(CO)H2O
TPPFC18 = Octa- β -chlorotetrakis(pentafluorophenyl)porphyrin
AUTHOR(S): Miroshnina, Dora R.; Schaefer, William F.; Labinger, Jay A.; Berceau, John E.; Gray, Harry B.
CORPORATE SOURCE: Arthur Amos Noyes Laboratory, California Institute of Technology, Pasadena, CA, 91129, USA
SOURCE: Inorganic Chemistry (1995), 34(7), 1751-5
CODEN: INOCCH; ISSN: 0020-1669
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Ru(II) octa- β -halotetrakis(pentafluorophenyl)porphyrins (RuTPPFX(CO), RuTPPFC18(py)2; X = Cl, Br) were synthesized, and the crystal structure of RuTPPFC18(CO)H2O was determined: monoclinic, space group P2₁/C, a 14.36(3), b 16.012(4), c 26.679(8) Å, β 93.23(2)°, Z = 4, ρ_w = 0.028 on R2 for 8053 reflections, R = 0.047 for 5378 reflections with R_{σ^2} > 3 σ^2 (F₀); the porphyrin is highly distorted, with a 1.17 Å maximum displacement of the β -Cl atoms from the mean porphyrin plane. The reduction potentials of RuTPPFX complexes are much more pos. (> 0.5 V) than those of unhalogenated analogs, owing to the influence of the electron-withdrawing X atoms. The relatively high energies of the Soret bands in the RuTPPFX electronic spectra are consistent with an electronic structural model involving RuII back-bonding to the porphyrin π^* orbitals.
IT 139944-26-6, Octa- β -bromotetrakis(pentafluorophenyl)porphyrin
161405-60-3, Octa- β -chlorotetrakis(pentafluorophenyl)porphyrin
n
RI: ACT (Reactant); PACT (Reactant or reagent)
for (preparation of ruthenium halogenated porphyrinato complexes)
RN 139944-26-6 CAPLUS
CN 218,226-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (SC1) (CA INDEX NAME)

L6 ANSWER 117 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
PAGE 1-A

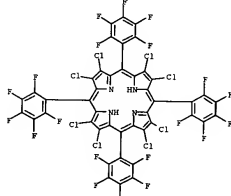


PAGE 2-A

RN 161405-60-3 CAPLUS
CN 218,226-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(pentafluorophenyl)- (SC1) (CA INDEX NAME)

L6 ANSWER 117 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

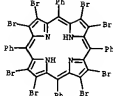
PAGE 1-A



PAGE 2-A

1

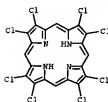
L6 ANSWER 118 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:280691 CAPLUS
DOCUMENT NUMBER: 122:187159
TITLE: Sterically strained porphyrins - effects of nuclear protonation and peripheral substituents on the conformation in tetra-meso-, octa- β -, and dodeca-substituted porphyrin dications
AUTHOR(S): Sessler, Huihui O.; Forsyth, Timothy F.; Nguyen, Lien T.; Smith, Kevin M.
CORPORATE SOURCE: Dep. Chem., Univ. California, Davis, CA, 95616, USA
SOURCE: Angewandte Chemie (1994), 106(23/24), 2554-7 (See also Angew. Chem., Int. Ed. Engl., 1994, 33(23/24), 2483-7)
CODEN: ANCHAD; ISSN: 0044-8249
PUBLISHER: VCH
DOCUMENT TYPE: Journal
LANGUAGE: German
AB The conformations of meso-tetra-, β -octa-, and dodeca-substituted porphyrin dications are discussed.
IT 161614-78-4
RI: FPD (Properties)
(Effect of nuclear protonation and peripheral substituents on the conformation in tetra-meso-, octa- β -, and dodeca-substituted porphyrin dications)
RN 161614-78-4 CAPLUS
CN 218,226-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrafluorophenyl-, bis(trifluoroacetate), compd. with trichloromethane (Cl3) (SC1) (CA INDEX NAME)
CN 1
CNF 67-66-3
CNF C H Cl3
CN 2
CN 161614-77-3
CNF C44 H22 Br8 N4 . 2 C2 H F O3
CN 3
CN 131214-86-3
CNF C44 H22 Br8 N4



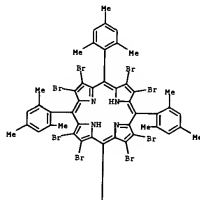
CN 4
CWN 76-05-1
CWP C2 H 3 O2



L6 ANSWER 119 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:11475 CAPLUS
DOCUMENT NUMBER: 122160334
TITLE: Ab Initio Hartree-Fock and Local Density Functional Calculations on Prototypal Halogenated Porphyrins. Do Electrochemically Measured Substituent Effects Reflect Gas-Phase Trends?
AUTHOR(S): Ghosh, Abhik
CORPORATE SOURCE: Department of Chemistry, University of Minnesota, Minneapolis, MN, 55455, USA
SOURCE: Journal of Physical Chemistry (1994), 98(43), 11004-6
CODEN: JPCHAK; ISSN: 0022-3654
DOCUMENT TYPE: Journal
LANGUAGE: English
AB First-principles quantum chemical methods have been employed to simulate and predict the electronic effects of peripheral polyhalogenation in porphyrins. Spin-RHF theory performs unexpectedly poorly in calculations of valence ionization potential of polyhalogenated porphyrins. In contrast, the results of local density functional calculations, of the lowest ionization potentials of free base porphyrin, meso-tetrafluoroporphyrin, and beta-octachloroporphyrin are consistent with existing electrochemical information.
IT 144811-81-4, beta-Octachloroporphyrin
RL PFP (Properties)
[ab initio Hartree-Fock and local density functional calculations of substituent effects in halogenated porphyrins]
NN 144811-81-4 CAPLUS
CN 218,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro- (9CI) (CA INDEX NAME)



L6 ANSWER 120 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:700639 CAPLUS
DOCUMENT NUMBER: 121300639
TITLE: Synthesis of beta-octasubstituted sterically bulky porphyrins by Suzuki cross coupling
AUTHOR(S): Zhou, Kang; Zhou, Zhong-yuan; Mak, Thomas C. W.; Chan, Kin Shing
CORPORATE SOURCE: Dep. Chem., Chin. Univ. Hong Kong, Shatin, Hong Kong
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1994), (18), 2819-20
CODEN: JCPK84; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 121300639
AB beta-Octasubstituted tetramethylporphyrins have been prepared in good yields by Suzuki cross coupling of beta-octabromotetramethylporphyrin with aryl- and alkyl-boronic acids. A single-crystal X-ray analysis of beta-octamethyltetramethylporphyrin shows a saddled non-planar structure.
IT 129056-48-0
RL RCT (Reactant), RACT (Reactant or reagent)
[Suzuki cross coupling with boronic acids]
NN 129056-48-0 CAPLUS
CN 21M,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

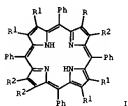


PAGE 1-A

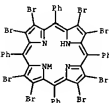
PAGE 2-A



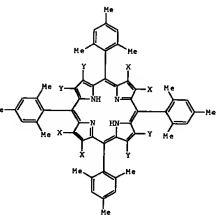
L6 ANSWER 121 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:43121 CAPLUS
 DOCUMENT NUMBER: 121:35121
 TITLE: Synthesis of β -aryl substituted porphyrins by palladium-catalyzed cross-coupling reactions
 AUTHOR(S): Chen, Kin Shing; Zhou, Xiang; Luo, Bao Sheng; Mak, Thomas C. W.
 CORPORATE SOURCE: Jap. Chem. Univ. Hong Kong, Shatin, Hong Kong
 SOURCE: Journal of the Chemical Society, Chemical Communications (1994), (1), 271-2
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB β -Bromoporphyrins I (R = Br, R1 = R2 = H; R = R2 = H, R1 = Br; R = R1 = R2 = Br) undergo Suzuki cross-coupling reactions with aryl boronic acids to give β -arylporphyrins I (R = Ar, R1 = R2 = H; R = R2 = H, R1 = Ar; R = R1 = R2 = Ar; Ar = Ph, 4-methoxyphenyl, 4-methylphenyl, 4-chlorophenyl in high yields and π -ray anal. shows that H2TPP(Ph) \ddagger I (R = R2 = H, R1 = Ph) (TPP = tetraphenylporphyrin) is centrosym, and possesses a hydrogen-bonded inner core.
 IT 131214-86-3
 RI: FRP (Properties)
 RN 131214-86-3 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (SCI) [CA INDEX NAME]



L6 ANSWER 122 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:43517 CAPLUS
 DOCUMENT NUMBER: 121:35117
 TITLE: Effect of conformation on the redox potentials of porphyrins halogenated in the β -pyrrole positions
 AUTHOR(S): Ochsenbein, Philippe; Ayoubou, Khadija; Mandon, Dominique; Fischer, Jean Weiss; Raymond, Austin; Rachel, M.; Jayaram, Karupiah; Gold, Avram; Turner, James; Fajer, Jack
 CORPORATE SOURCE: Inst. Le Bel, Univ. Louis Pasteur, Strasbourg, F-67039, Fr.
 SOURCE: Angewandte Chemie (1994), 106(3), 355-7 (See also Angew. Chem., Int. Ed. Engl., 1994, 106(3), 348-50)
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 GI

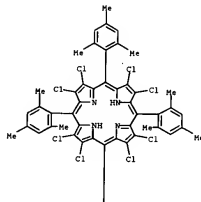


AB The porphyrins I (X = Y = H, Cl, Br; X = Cl, Br, Y = H) were prepared and their redox potentials and crystal structures were compared. Increasing halogenation in I is accompanied by increasing twist in the mol. I (X = Cl, Br, Y = H, H) were more difficult to reduce than I (X = Y = H), but I (X = Y = Cl, Br) were more easily oxidized than I (X = Cl, Br, Y = H).
 IT 155586-04-6
 RI: FRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystal structure of)
 RN 155586-24-6 CAPLUS
 CN Methanol, compd. with 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)-21H,23H-porphine (2:1) (SCI) [CA INDEX NAME]

L6 ANSWER 121 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

L6 ANSWER 122 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 CN 1
 CN 152037-87-1
 CNF C56 H46 Cl8 N4

PAGE 1-A

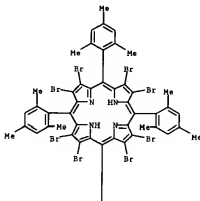


PAGE 2-A



CN 2
 CN 67-56-1
 CNF C H4 O
 H3C-CH
 IT 129904-48-07 132037-87-1P
 RI: SPN (Synthetic preparation); PREP (Preparation) (Preparation, redox potential, and conformation of)
 RN 129904-48-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-

PAGE 1-A

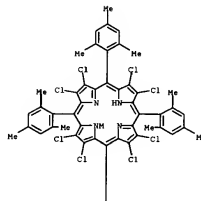


PAGE 2-A



RN 152037-87-1 CAPLUS
CN 21M,23M-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (SC1) (CA INDEX NAME)

PAGE 1-A

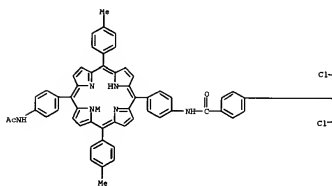


PAGE 2-A

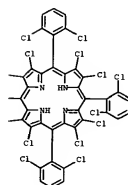


L6 ANSWER 123 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
ACCESSION NUMBER: 159411114 CAPLUS
DOCUMENT NUMBER: 120311114
TITLE: Free Energy Dependence of Photoinduced Charge Separation Rates in Porphyrin Dyads
AUTHOR(S): DeFrancisco, Emilio R.; Liddell, Paul A.; Leggett, Lane; Moore, Ann L.; Moore, Thomas A.; Guet, Devone
CORPORATE SOURCE: Center for the Study of Early Events in Photocatalysis, Arizona State University, Tempe, AZ, 85287, USA
SOURCE: Journal of Physical Chemistry (1994), 98(7), 1758-61
CODING: JPCHAK; ISSN: 0022-3654
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of covalently linked porphyrin dyads in which the thermodyn. driving force for interporphyrin photoinduced charge separation spans a range of 1.13 eV has been prepared. Time-resolved fluorescence studies have yielded 22 rate constants for photoinduced electron transfer in dichloromethane solution ranging from 4.1 x 10⁹ to 5.9 x 10¹¹ s⁻¹. The data are consistent with the theor. treatments of R. Marcus (1956) and V. Lavich (1966), although there is no evidence for inverted porphyrin moieties is about 4 times faster than transfer involving a zinc porphyrin and having the same thermodyn. driving force, based on electrochem. measurements. Photoinduced electron transfer to an excited singlet state and electron transfer from an excited singlet state have the same dependence upon free energy change.
IT 154991-95-7 154991-96-8 154991-97-9
154996-34-2 154996-35-3 155208-78-7
RI: FPD (Properties)

PAGE 1-A

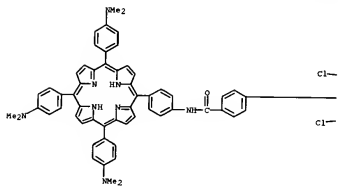


PAGE 1-B

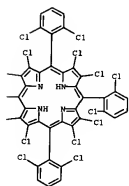


RN 154991-66-8 CAPLUS
CN Benzamide, N-[4-{15-[4-{(acetylamino)phenyl}-10,20-bis(4-methylphenyl)-21M,23M-porphin-5-yl]-N-(4-{10,15,20-tris(4-(dimethylamino)phenyl)-21M,23M-porphin-5-yl}phenyl)- (SC1) (CA INDEX NAME)

PAGE 1-A

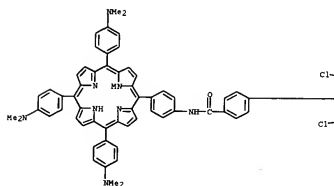


PAGE 1-B

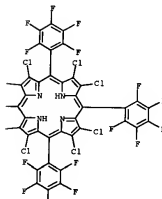


RN 154891-87-9 CAPLUS
CN Benzamide, 4-[2,3,7,8,12,13,17,18-octachloro-10,15,20-tris(pentafluorophenyl)-21H,23H-porphin-5-yl]-N-[4-(10,15,20-tris(4-(dimethylamino)phenyl)-21H,23H-porphin-5-yl)phenyl]- (SC1) (CA INDEX NAME)

PAGE 1-A



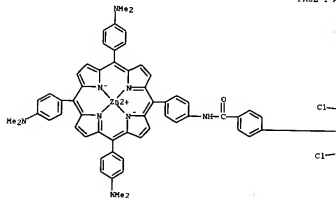
PAGE 1-B



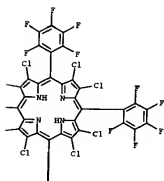
PAGE 2-B

f

PAGE 1-A



PAGE 1-B

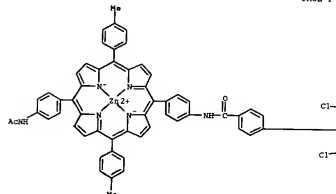


PAGE 2-B

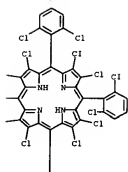


RN 154966-35-9 CAPLUS
CN Zinc, [N-[4-[15-[4-(acetylamino)phenyl]-10,20-bis(4-methylphenyl)-21H,23H-porphin-5-yl]phenyl]-4-[2,3,7,8,12,13,17,18-octachloro-10,15,20-tris(2,6-dichlorophenyl)-21H,23H-porphin-5-yl]benzamidoato(2-)]-, (SP-4-2)- (SC1) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

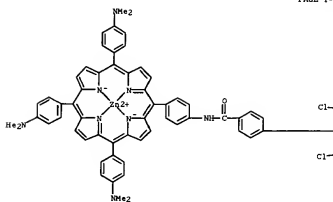


PAGE 2-B

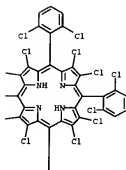


DN 155208-76-7 CAPLUS
 CN Zinc, {4-[(2,3,7,8,12,13,17,18-octachloro-10,15,20-tris(2,6-dichlorophenyl)-21H,23H-porphine-5-yl)-N-[4-[(10,15,20-tris(4-(dimethylamino)phenyl)-21H,23H-porphin-5-yl)phenyl]benzenamido(2-)]-, (5F-4-2)- (9C1) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



PAGE 2-B



ACCESSION NUMBER: 1994:283247 CAPLUS
 DOCUMENT NUMBER: 120:283247
 TITLE: Resonance light-scattering studies of porphyrin diacid aggregates
 AUTHOR(S): Festerack, Robert F.; Schaefer, Kurt F.; Hambright, Peter
 CORPORATE SOURCE: Department of Chemistry, Swarthmore College, Swarthmore, PA, 19081, USA
 SOURCE: Inorganic Chemistry (1994), 33(5), 2862-5
 CODING: INOCN; ISSN: 0020-1669
 JOURNAL

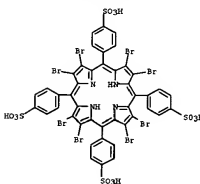
DOCUMENT TYPE: English
 LANGUAGE: English
 AB Resonance light scattering measurements were used to investigate the solute species present in acidic aqueous media for some 14 sulfonated porphyrins. The anomalous absorption band in the Soret region reported for several of these porphyrins arises from the formation of extended aggregates of electronically coupled chromophores and illustrate the sensitivity and specificity of this unconventional light scattering method.

IT 154783-99-0
 RI: FR: (Properties)

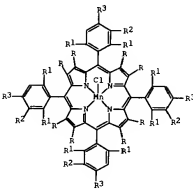
(resonance light scattering visible spectra of aggregates of)

DN 154783-99-0 CAPLUS

CN Benzenesulfonic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octabromo-21H,23H-porphine-5,10,15,20-tetrayl)tetrakis- (9C1) (CA INDEX NAME)

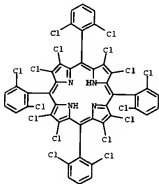


L6 ANSWER 125 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 ACCESSION NUMBER: 1994:134113 CAPLUS
 DOCUMENT NUMBER: 120:134113
 TITLE: Catalytic activity and chemical stability of perhalogenated manganese(II)-tetraarylporphyrins in alkene epoxidations
 AUTHOR(S): Benfi, Stefano; Mandelli, Roberto; Montanari, Fernando; Quici, Silvio
 CORPORATE SOURCE: Oip. Chim. Org. Ist. Univ. Milano, Milano, I-20133, Italy
 SOURCE: Gazzetta Chimica Italiana (1993), 123(7), 409-15
 CODING: GCITA9; ISSN: 0016-3603
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI

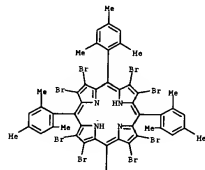


AB Structural factors, which govern the chemical stability of metalloctetraporphyrins [R = H, Cl, Br, I, R2 = Me, R3 = H, R = H, Br, R1 = R3 = Me, R2 = H, R = Me, R1 = Cl, R2 = R3 = H] were investigated in CHCl₃/H₂O two-phase alkene epoxidations, promoted by aqueous NaOCl or 30% H₂O₂. In contrast to recent literature reports, the perhalogenation of pyrrrole β -positions of tetraarylporphyrins decreases the reactivity and the robustness of these catalysts with respect to the unsubstituted ones. The only exception is provided by I (R = Br, R1 = R3 = Me, R2 = H, I), which proved to be more efficient than I (R = H, R1 = R3 = Me, R2 = H). Nevertheless I is far less reactive than I (R = R2 = R3 = H, R1 = Cl). The influence of external factors, such as Mn-porphyrin/oxidant/substrate ratios and that of the axial ligand, was also examined. It was demonstrated that the assessed stability of where a large excess of substrate is used with respect to the oxidant, conditions which are difficult to use on a preparative scale.
 120006-40-0p 134833-67-39
 RI: SPN (Synthetic preparation); PREP (Preparation)

L6 ANSWER 125 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



L6 ANSWER 125 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 ACCESSION NUMBER: 1994:134113 CAPLUS
 DOCUMENT NUMBER: 120:134113
 TITLE: Catalytic activity and chemical stability of perhalogenated manganese(II)-tetraarylporphyrins in alkene epoxidations
 AUTHOR(S): Benfi, Stefano; Mandelli, Roberto; Montanari, Fernando; Quici, Silvio
 CORPORATE SOURCE: Oip. Chim. Org. Ist. Univ. Milano, Milano, I-20133, Italy
 SOURCE: Gazzetta Chimica Italiana (1993), 123(7), 409-15
 CODING: GCITA9; ISSN: 0016-3603
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



PAGE 1-A

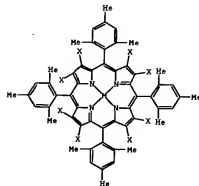
RI 134833-67-3 CAPLUS
 CN 216, 236-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(2,4-dichlorophenyl)- (PCI) (CA INDEX NAME)



PAGE 2-A

L6 ANSWER 126 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

L6 ANSWER 126 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 1994:67865 CAPLUS
 DOCUMENT NUMBER: 120:67865
 TITLE: The oxoiron = cation radical of meso-tetraarylporphyrin chlorinated at the eight β positions: electronic and structural properties
 AUTHOR(S): Othenbabin, Philippe; Mandon, Dominique; Fischer, Jean; Waser, Raymond; Austin, Rachel; Jayara, Karupiah; Gold, Avram; Turner, James; Bill, Eckhardt et al.
 CORPORATE SOURCE: Inst. Lebel, Univ. Louis Pasteur, Strasbourg, F-67070, Fr.
 SOURCE: Angewandte Chemie (1993), 105(10), 1504-5 (See also Angew. Chem., Int. Ed. Engl., 1193, 32(10), 1457-39)
 CODING: ANCEA9; ISSN: 0044-8249
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 GI

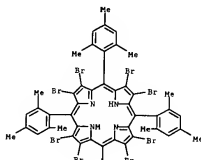


I

AB I (M = FeCl, X = Cl, Br) were prepared by the metalation of I (M = H₂) with FeCl₂. 1, H₂O are tetragonal, space group P₄h1v,42ic, Z = 2, R/Rw = 0.069/0.091 and 0.053/0.075, resp. The Fe in I (M = FeCl, X = Cl, Br) lies 0.55(1) Å above the plane of the 4 N atoms. The average deviations of the β -C atoms from the plane are 0.87 and 0.90 Å for I (M = FeCl, X = Cl, Br), resp., in comparison to 0.70 and 0.88 Å for I (M = H₂, X = Cl, Br), resp. I (M = FeCl, X = Cl, Br) were oxidized by m-chloroperoxybenzoic acid at -80° to give in toluene I (M = FeO, X = Cl, Br) which were ESR-inactive but in CHCl₃ ESR-active 1+ (M = FeO, X = Cl) was observed. The ESR data for 1+ (M = FeO, X = Cl) is typical for a quartet ground state of 2+ 1/2 and indicated that ferromagnetic coupling occurs between the low-spin Fe(IV) center and the porphyrin π -radical cation. The temperature dependence of the exchange coupling is described using the 3-state model of the Kramer-doublet. Comparison of the spectral properties of 1+ (M = FeO, X = Cl) with those of 1+ (M = FeO, X = H) indicate that they have similar

L6 ANSWER 126 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 electronic structures.
 IT 126064-48-0p 152037-87-1
 RI: RCT (Reactant); SW (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and mol. structure and oxidation of, by peroxybenzoic acid)
 RN 126064-48-0 CAPLUS
 CN 23H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (9Cl) (CA INDEX NAME)

PAGE 1-A



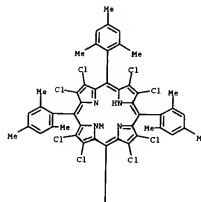
PAGE 2-A



IN 152037-87-1 CAPLUS
 CN 23H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (9Cl) (CA INDEX NAME)

L6 ANSWER 126 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A



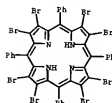
PAGE 2-A



L6 ANSWER 127 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1993:194357 CAPLUS
 DOCUMENT NUMBER: 119:194357
 TITLE: Electrochemical and spectroelectrochemical behavior of cobalt(III), cobalt(II), and cobalt(I) complexes of meso-tetraphenylporphyrinate bearing bromides on the β -pyrrole positions
 AUTHOR(S): D'Souza, Francis; Vallard, Annes; Van Cesselbecke, Eric; Franzen, Michelle; Souda, Taisatsu; Tagliatesta, Pietro; Kadish, Earl M.
 CORPORATE SOURCE: Dep. Chem., Univ. Houston, Houston, TX, 77204-5641, USA
 SOURCE: Inorganic Chemistry (1993), 32 (19), 4042-8
 CODEN: INOCAN; ISSN: 0020-1669
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The synthesis and characterization of (meso-tetraphenylporphyrinato)cobalt (II) complexes containing 6, 7, or 8 Br groups at the β -pyrrole positions of the macrocycle are reported. Each compound undergoes a degree of Br substitution. The 1st oxidation yields [(TPP)Br_nCo(II)]⁺ while the 1st reduction gives [(TPP)Br_nCo(I)]⁻ where (TPP)Br_n is the dianion of the brominated tetraphenylporphyrin. Cyclic voltammetry studies reveal a pos. shift of the anal. and ring-centered redox potentials of the bromo porphyrins as compared to E_{1/2} for the reduction and oxidation of unsubstituted

(TPP)Co. The optical absorption spectra of each electrogenerated Co(I) and Co(III) complex were recorded in a thin-layer cell and show that the transition energies for both the core and visible bands vary as a function of Br groups on the porphyrin periphery. The electron-withdrawing Br substituents also produce a red shift in the core and visible bands of the porphyrin which follows the order: (TPP)Br₆Co > (TPP)Br₇Co > (TPP)Br₈Co > (TPP)Br₆Co > (TPP)Co. The singly oxidized and singly reduced products are stable on the cyclic voltammetric and thin-layer times scales, but further reduction beyond [(TPP)Br_nCo(I)]⁻ lead to the extensive elimination of Br groups to give [(TPP)Co(I)]⁻ as a final product in solution. Results obtained by controlled-potential thin-layer spectroelectrochem. and rotating ring disk electrode voltammetry confirm this expl. observation.

IT 151214-48-3
 RI: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with cobalt acetate)
 RN 151214-48-3 CAPLUS
 CN 23H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl- (9Cl) (CA INDEX NAME)

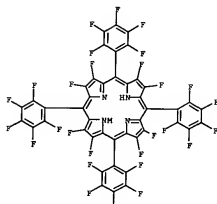


L6 ANSWER 127 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)

IT	121393-80-2	1468311-81-4	1468311-82-5	1468311-83-6	1468311-86-9	1468311-87-0	1468311-92-7
	Re: RCT (Reactant); RACT (Reactant or reagent) (electronic effect of peripheral substituent in, MO calcn of)						
RN	121393-88-0	CAPUS					
CN	230,230-Torpheis, 2,3,7,4,12,13,17,18-ceta-Torpo-6,10,15,20-tetrakis(pentafluorophenyl)- (PCT) (CA INDEX NAME)						

[illegible]

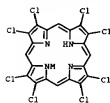
PAGE 1-A



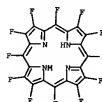
PAGE 2-A

1

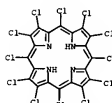
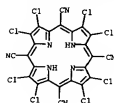
RN 144811-81-4 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro- (9CI) (CA INDEX NAME)



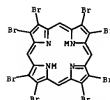
RN 144811-82-5 CAPLUS
CN 21H,23H-Porphine, 2,3,5,7,8,10,12,13,15,17,18,20-dodecachloro- (9CI) (CA INDEX NAME)



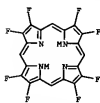
RN 144811-92-7 CAPLUS
CN 21H,23H-Porphine-5,10,15,20-tetracarboxynitrile, 2,3,7,8,12,13,17,18-octachloro- (9CI) (CA INDEX NAME)



RN 144811-93-6 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo- (9CI) (CA INDEX NAME)

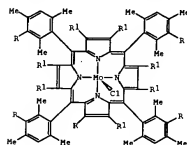


RN 144811-96-9 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro- (9CI) (CA INDEX NAME)



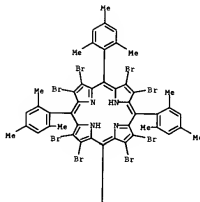
RN 144811-97-0 CAPLUS
CN 21H,23H-Porphine, 2,3,5,7,8,10,12,13,15,17,18,20-dodecachloro- (9CI) (CA INDEX NAME)

L6 ANSWER 131 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:633728 CAPLUS
DOCUMENT NUMBER: 117:233728
TITLE: Preparation and catalytic activities of molybdenum haloperoxide porphyrins in hydrogen peroxide olefin oxidations
AUTHOR(S): Muffmann, Pascal; Munier, Bernard
CORPORATE SOURCE: Lab. Chim. Coord., CNRS, Toulouse, 31077, Fr.
SOURCE: Rev Journal of Chemistry (1992), 16(5), 559-61
CODEN: RJCHES; ISSN: 0398-0936
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 117:233728
CI



AB MoII(II)(R1R2)Cl (R1 = meso-tetramethylporphyrinate) (I, R = H, R1 = Br) and MoII(Cl)(R1R2)Cl (I, R = H, R1 = Cl) catalyze the epoxidation of cyclooctene by 30% hydrogen peroxide in Et acetate at 70°.
IT 18906-48-0
R1: RCT (Reactant); RACT (Reactant or reagent)
(metalloid of, with molybdenum hexacarbonyl)
RN 129006-48-0 CAPLUS
CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

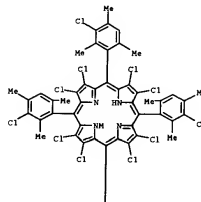


PAGE 2-A



IT 141573-97-99
 RLI RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 [preparation and metallation of, with molybdenum hexacarbonyl]
 RN 141573-97-4 CAPLUS
 CN 21M,23H-porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(3-chloro-2,4,6-trimethylphenyl)- (SC1) (CA INDEX NAME)

PAGE 1-A



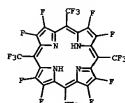
PAGE 2-A



L6 ANSWER 132 of 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:475256 CAPLUS
 DOCUMENT NUMBER: 117:475256
 TITLE: Metal coordination complex catalysts containing a halogenated ligand for hydrocarbon oxidation
 Billis, Paul E., Jr.; Lyons, James E.; Myers, Harry K., Jr.
 Sun Refining and Marketing Co., USA
 Bur. Pat. Appl., 7 p.
 CODEN: EPKXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 11
 PATENT INFORMATION:

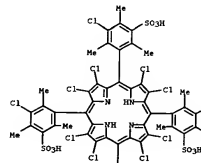
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 471561	A2	19920219	EP 1991-307493	19910814
EP 471561	A3	19920226		
B, EE, DE, FR, GB, IT, NL				
NO 1931550	A	19920217	NO 1991-3150	19910813
CA 2049177	AA	19920217	CA 1991-2049177	19910814
JP 0513037	A2	19910601	JP 1991-229715	19910816
US 5663238	A2	19970902	US 1996-672302	19960627
PRIORITY APPL. INFO:				
			US 1990-568116	A 19900816
			US 1987-246	A2 19870102
			US 1987-66666	A2 19870926
			US 1989-425089	B2 19891023
			US 1994-303106	A3 19940907

OTHER SOURCE(S): MARKAT 117:475256
 AB The catalysts, useful for oxidation of alkanes, are perchlorinated porphyrin or perchlorinated polychlorinated metal complexes (metal = Fe, Co, Ni, Ru, and/or Cu), and are used to catalyze air or O₂ oxidation of aliphatic hydrocarbons. Thus, air oxidation of isobutane in C₆₀ at 80° in presence of 0.013 mmol Fe(TPPF2O8)Cl (TPF = tetraphenylporphyrin moiety) gave 89 mol tert-butyl/100 mol liquid product and 3135 mol O₂ consumed/mol catalyst.
 IT 142473-10-7
 RLI RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with ferrous chloride)
 RN 142473-10-7 CAPLUS
 CN 21M,23H-porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(trifluoromethyl)- (SC1) (CA INDEX NAME)



L6 ANSWER 133 of 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:447538 CAPLUS
 DOCUMENT NUMBER: 117:47538
 TITLE: Olefin epoxidation and alkane hydroxylation catalyzed by robust sulfonated manganese and iron porphyrins supported on cationic ion-exchange resins
 Campestre, Sandro Weinert, Bernad Lab. Chim. Coord., CNRS, Toulouse, 31077, Fr.
 Inorganic Chemistry (1992), 31(11), 1999-2006
 CODEN: INOCHA; ISSN: 0020-1669
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 117:47538
 AB Robust sulfonated manganese and iron porphyrins supported on poly(vinylpyridinium) polymers have been used as catalysts in olefin epoxidation and alkane hydroxylation by t-butyloxybenzene. The poly(vinylpyridine) polymers are attached to protonated or methylated metaloporphyrins are attached to the coordination of one pyridine unit, thus providing a proximal effect, and by additional interactions of the porphyrin sulfonate groups with the polymer pyridinium units. The best catalysts are the complexes containing halogen atoms at the pyrrole β-positions. In all these oxygenation reactions manganese porphyrins are better catalysts than the corresponding iron complexes. Comparative studies with another ion-exchange resin without a potential axial ligand show that the proximal effect is a key factor in metalloporphyrin-catalyzed reactions, not only for soluble complexes but also for supported catalysts.
 IT 142568-64-2p
 RLI: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and complexation with manganese)
 RN 142568-64-2 CAPLUS
 CN Benzenesulfonic acid, 3,3',3'',3'''-(1,2,3,7,8,12,13,17,18-octachloro-21M,23H-porphine-5,10,15,20-tetrayl)tetrakis(3-chloro-2,4,6-trimethyl-, tetraiodium salt (SC1) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



● Me Na

IT 141573-97-9

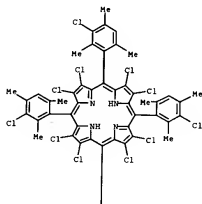
RI: RCT (Reactant); RACT (Reactant or reagent)

(nucleation of)

AN 141573-97-9 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(3-chloro-2,4,6-trimethylphenyl)- (9Cl) (CA INDEX NAME)

PAGE 1-A



L6 ANSWER 134 OF 148

CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1934414399 CAPLUS

DOCUMENT NUMBER:

117:34399

TITLE:

Preparation and catalytic activity of the manganese(III) dodecachlorotetramesitylporphyrin complex

AUTHOR(S):

Hoffmann, Pascal; Robert, Anne; Meunier, Bernard
Lab. Chim. Coord., CNRS, Toulouse, 31077, Fr.
Comptes Rendus de l'Académie des Sciences, Serie II: Mécanique, Physique, Chimie, Sciences de la Terre et de l'Univers (1992), 314(1), 51-4
CODEN: CRAMED; ISSN: 0764-4450

CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

AB Chloration with 8-chlorobornuimide of the zinc complex of tetramesitylporphyrin gives, after demetalation, the free porphyrin ligand *meso*-tetrakis(3-chloro-2,4,6-trimethylphenyl)-*p*-octachloroporphyrin, HCl12TMP. The manganese and iron complexes of this new halogenated porphyrin were prepared. The catalytic activity of Mn(Cl12TMP)Cl was evaluated and compared with the activities of Mn(TMP)Cl and Mn(HcTMP)Cl, when these catalysts are associated with potassium monopersulfate or manganese monoperphthalate as oxygen donors. An abridged English version is included.

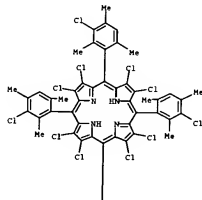
IT

RI: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and metalation of, in catalyst preparation)

AN 141573-97-9 CAPLUS

CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(3-chloro-2,4,6-trimethylphenyl)- (9Cl) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

L6 ANSWER 134 OF 148

CAPLUS COPYRIGHT 2005 ACS on STN

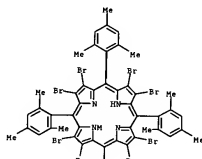
(Continued)

PAGE 2-A



16 ANSWER 135 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 159242505 CAPLUS
 DOCUMENT NUMBER: 117:26161
 TITLE: Preparation and catalytic activities of the manganeses and iron derivatives of BrTMP and ClTMP, two robust porphyrin ligands obtained by halogenation of tetramethylporphyrin.
 AUTHOR(S): Hoffmann, P.; Robert, A.; Meunier, B.
 CORPORATE SOURCE: Lab. Chim. Coord., CNRS, Toulouse, 31077, Fr.
 SOURCE: Bulletin de la Societe Chimique de France (1992), 129(1), 85-97
 CODEN: BSCFAS; ISSN: 0037-8968
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The ionic halogenation of tetramethylporphyrin by N-bromosuccinimide or N-chlorosuccinimide gives, as main product, meso-tetramethyl-p-octabromoporphyrin (H2BrTMP) and meso-tetrakis(3-chloro-2,4,6-trimethylphenyl)-p-octachloroporphyrin (H2ClTMP), resp. Both Me and Fe derive, of these two porphyrins are efficient catalysts for olefin epoxid. and alkane hydroxylation. The kinetic isotope effects of hydroxylation reactions were determined using different porphyrin catalysts and various O atom donors. The k_{H}/k_{D} values ranged from 2 to 0.8 to 0.5 and were more dependent on the nature of the central metal and the oxidant than on the structure of the porphyrin ligand itself. PhIO is the only O atom donor in association with Fe porphyrins able to give high kinetic isotope effects (7.7 to 8.0) close to the primary isotope effects reported for cyclochrome P 450 itself.
 IT 129006-48-0P 141578-9-9
 RI: SPN [Synthetic preparation]; PREP [Preparation]
 (preparation and complexation of)
 RN 129006-48-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (PCL) (CA INDEX NAME)

PAGE 1-A

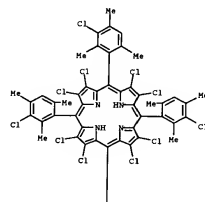


16 ANSWER 135 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
 141573-97-9 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(3-chloro-2,4,6-trimethylphenyl)- (PCL) (CA INDEX NAME)

PAGE 2-A



PAGE 1-A



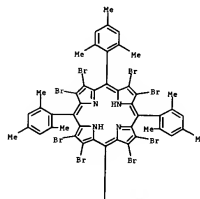
PAGE 2-A



16 ANSWER 136 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 159242724 CAPLUS
 DOCUMENT NUMBER: 116:24724
 TITLE: β -halogenated-pyrrole porphyrins. Molecular structures of 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetramethylporphyrin, nickel(II) (2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetramethylporphyrin, and nickel(II) 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin.
 AUTHOR(S): Mandou, D.; Oehenbein, P.; Fischer, J.; Weiss, R.; Geyray, R.; Austin, R. M.; Gold, A.; White, F. S.; Brigaudeau, C.; et al.
 CORPORATE SOURCE: Inst. Lebel, Univ. Louis Pasteur, Strasbourg, F-67070, Fr.
 SOURCE: Inorganic Chemistry (1992), 31(11), 2044-9
 CODEN: INOCAL; ISSN: 0020-1660
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The X-ray structures of the β -substituted-pyrrole tetraarylporphyrin 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetramethylporphyrin (H2TMBP), Ni(TMBP), and Ni(TFPFOPB-1)/ZnCl2 H2TFPFOB = 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin) are reported. The syntheses of H2TFPFOB is described. All these mols. are nonplanar, displaying saddle-shaped conformations. The saddle distortion minimize the intramol. steric interactions between the Br substituents and the ortho (ortho') C atoms or ortho (ortho') substituents of the Pd ring, and consequently, the corresponding contact distances have similar values in all compds. Because of the distortion of the porphyrin cores, the cavity defined by the ortho (ortho') substituents gives slightly less steric protection than in the nonstrained nearly planar ortho- and ortho'-substituted tetraarylporphyrin complexes.
 Crystalllog. data: H2TMBP: tetragonal, space group P4₁2₁2, Z = 2, a = 0.064, b = 0.069; Ni(TMBP): tetragonal, space group P4₁2₁2, Z = 2, a = 0.049, b = 0.057; Ni(TFPFOB-1)/ZnCl2: monoclinic, space group C2/c, Z = 8, a = 0.047, b = 0.064.
 IT 129006-48-0
 RI: RCT [Reactant]; RACT [Reactant or reagent]
 (crystal structure and reaction of, with nickel acetate)
 RN 129006-48-0 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (PCL) (CA INDEX NAME)

16 ANSWER 136 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

PAGE 1-A

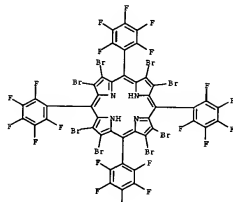


PAGE 2-A



IT 139944-28-6P
 RI: RCT [Reactant]; SPN [Synthetic preparation]; PREP [Preparation]; RACT [Reactant or reagent]
 (preparation and reaction of, with nickel acetate)
 RN 139944-28-6 CAPLUS
 CN 21H,23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (PCL) (CA INDEX NAME)

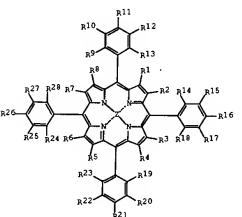
PAGE 1-A



PAGE 2-A

I

L6 ANSWER 137 OF 146 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1592:213987 CAPLUS
 DOCUMENT NUMBER: 116:213987
 TITLE: Oxidation of olefins with oxygen catalyzed by
 halogenated porphyrin complexes
 INVENTOR(S): Tsuchiya, Shingo; Kawai, Motomasa
 PATENT ASSIGNOR(S): Mitsui Toatsu Chemicals, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 COUEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:
 PATENT NO. _____ KIND DATE APPLICATION NO. DATE
 JP 03246238 A2 19911101 JP 1990-42342 19900226
 JP 270084 B2 19900227
 PRIORITY APPL. INFO.: JP 1990-42342 19900226
 OTHER SOURCE(S): MARPAT 116:213987
 GI

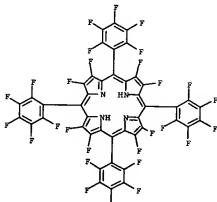


I

AB Olefinic compds. are oxidized with O to O-containing compds. in the presence of 1 (R1 - R28 = Cl-4 alkyl, trihalomethyl, M, halor 2l of R1 - R28 is halor 2 consisting of a cation of a valence (Me) from groups IA to VIA, IB to VIIIB, and VIII elements and an anion (X-) from O-, F-, Cl-, Br-, I-, S-, OH-, MeO-, RCO-, RCO-, R-Ph-, test-OSHO-, Ph-, AcO-, CH3-, and ClO4- in the form of 2M+, H4M+, H2M+, M3X-, M4X-2, OM4+, or OM5X-; n = 1-5). The reaction may be carried out in the presence of a base (for example, alc. and typically MeOM) and the process is applicable to propylene, 1-butene, 2-butene, butadiene, isoprene, cyclopentene,

L6 ANSWER 137 OF 146 CAPLUS COPYRIGHT 2005 ACS on STN (Continued)
 ACCESSION NUMBER: 1592:213987 CAPLUS
 DOCUMENT NUMBER: 116:213987
 TITLE: Oxidation of olefins with oxygen catalyzed by
 halogenated porphyrin complexes
 INVENTOR(S): Tsuchiya, Shingo; Kawai, Motomasa
 PATENT ASSIGNOR(S): Mitsui Toatsu Chemicals, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 COUEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:
 PATENT NO. _____ KIND DATE APPLICATION NO. DATE
 JP 03246238 A2 19911101 JP 1990-27219 19900208
 JP 1990-27219 B2 19900208
 PRIORITY APPL. INFO.: CAPSPACT 116:106069; MARPAT 116:106069
 OTHER SOURCE(S):
 AB Oxidation of olefins with oxygen catalyzed by halogenated porphyrin complexes
 oxygen in the presence of porphyrin complexes and also or amines. Thus, air oxidation of 3 mmol cyclohexene in CH2Cl2 in the presence of iratriton(III) chloride and MeOH at 25° for 2 h gave 0.15 mmol oxidation products 1,2-epoxycyclohexene, cyclohex-2-en-1-ol, and cyclohex-2-en-1-one in a ratio of 22:30:48.
 IT 121399-88-0P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 RN 121399-88-0 CAPLUS
 CN 21M, 23M-Porphine, 2,3,7,9,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl) - (PCT) (CA INDEX NAME)

PAGE 1-A

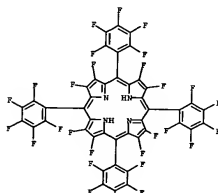


PAGE 2-A

I

L6 ANSWER 138 OF 146 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:106069 CAPLUS
 DOCUMENT NUMBER: 116:106069
 TITLE: Porphyrin complexes as oxidation catalysts for olefins
 INVENTOR(S): Tsuchiya, Shingo; Kawai, Motomasa
 PATENT ASSIGNOR(S): Mitsui Toatsu Chemicals, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 COUEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:
 PATENT NO. _____ KIND DATE APPLICATION NO. DATE
 JP 03222574 A2 19911016 JP 1990-27219 19900208
 JP 1990-27219 B2 19900208
 PRIORITY APPL. INFO.: CAPSPACT 116:106069; MARPAT 116:106069
 OTHER SOURCE(S):
 AB Oxidation of olefins with oxygen catalyzed by halogenated porphyrin complexes
 oxygen in the presence of porphyrin complexes and also or amines. Thus, air oxidation of 3 mmol cyclohexene in CH2Cl2 in the presence of iratriton(III) chloride and MeOH at 25° for 2 h gave 0.15 mmol oxidation products 1,2-epoxycyclohexene, cyclohex-2-en-1-ol, and cyclohex-2-en-1-one in a ratio of 22:30:48.
 IT 121399-88-0P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 RN 121399-88-0 CAPLUS
 CN 21M, 23M-Porphine, 2,3,7,9,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl) - (PCT) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

1

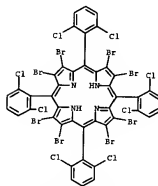
F

L6 ANSWER 139 OF 148 CAPLUS COPYRIGHT 2005 ACS on STM
 ACCESSION NUMBER: 1591152796 CAPLUS
 DOCUMENT NUMBER: 115123796
 TITLE: Silver halide color photographic material containing porphyrin for black spot prevention
 INVENTOR(S): Kawasaki, Mikio
 PATENT ASSIGNEE(S): Konica Co., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 OTHER: JESKAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01041441	A2	19910221	JP 1989-177732	19890707
PRIORITY APPL. INFO.			JP 1989-177732	19890707
OTHER SOURCE(S):			HARPAT 115:123796	

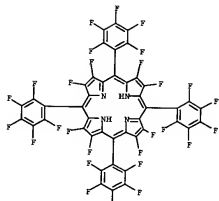
AB A photop. material contains α porphyrin derivative in the α hydrophilic layer on the support. It prevents the image layer from subjecting to generation of macrospot defects, and is suitably applied to x-ray film for medical diagnosis. α , β , γ , δ -Tetraphenylporphyrin was added into the Ag(Br,I) emulsion for a black-and-white film for x-ray diagnosis.

IT 107028-88-0 121399-88-0 138762-91-3
 RI REF (device component use): US2 (Idea)
 RN 107035-95-0 CAPLUS
 CN 21R,23R-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,6-dichlorophenyl)- (SCI) (CA INDEX NAME)

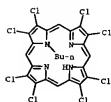


RN 121399-88-0 CAPLUS
 CN 21R,23R-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)- (SCI) (CA INDEX NAME)

PAGE 1-A



RN 135762-91-3 CAPLUS
 CN 21R,23R-Porphine, 21-butyl-2,3,7,8,12,13,17,18-octachloro- (SCI) (CA INDEX NAME)



PAGE 2-A

1

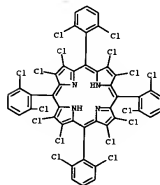
F

L6 ANSWER 140 OF 148 CAPLUS COPYRIGHT 2005 ACS on STM
 ACCESSION NUMBER: 1591151423 CAPLUS
 DOCUMENT NUMBER: 115114223
 TITLE: Metal-assisted reactions. Part 22. Synthesis of perhalogenated porphyrins and their use as oxidation catalysts
 AUTHOR(S): Goncalves, Antonio M. D Rocha; Johnstone, Robert A.
 CORPORATE SOURCE: Dep. Quim. Univ. Coimbra, Coimbra, 3000, Port.
 SOURCE: Tetrahedron Letters (1991), 32(10), 1355-8
 OTHER: TETRAV ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English

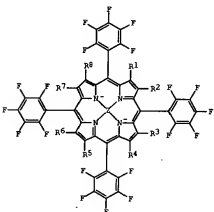
AB meso-Tetraarylporphyrins have been perchlorinated and perbrominated at peripheral (beta)-positions of the pyrrole rings by high-yielding procedures. These halogenated porphyrins show enhanced catalytic activity towards oxidation of alkanes and alkenes but are not stable when H2O2 is used as the O donor. The reason for this instability appears to lie in extensive homolytic dissociation of H2O2 with consequent rapid attack at the porphyrin β -position.

IT 134823-87-3
 RI: SPW (Synthetic preparation); PREP (Preparation)
 (Preparation and complexation, with manganese)

RN 134823-87-3 CAPLUS
 CN 21R,23R-Porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetrakis(2,6-dichlorophenyl)- (SCI) (CA INDEX NAME)



PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02250883	A2	19901008	JP 1989-241912	19890920
JP 2845982	B2	19990113		
PRIORITY APPL. INFO.:			JP 1988-310051	A1 19881209
OTHER SOURCE(S):	MARPAT	115:79933		
GI				



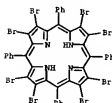
AB The complex is I [R]-8 = H, F [R]1; and z = Group IA-VIA, cation
(M+54) of Group IV-VIII, VII1, and anion (X-1) of F-, Cl-, Br-, I-, O-,
OH-, MeO-, EtO-, PrO-, Me2CO-, tert-BuO-, PhO-, AcO-, CN-, SCN-, and/or
ClO4-; possible form 2M+, M+M-, M2-, M3X-, M4X-2, O:M4-, O:M5X-1.
IT An organic compound is oxidized by peroxides with the complex as a catalyst.
12358-08-09
R1: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction of)

16 ANSWER 142 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1991:54757 CAPLUS
 DOCUMENT NUMBER: 114:54757
 TITLE: Octaorbomethraphenylporphyrin and its metal
 derivatives: Electronic structure and electrochemical
 properties
 AUTHOR(S): Bhyrappa, P.; Krishnan, V.
 CORPORATE SOURCE: Dep. Inorg. Phys. Chem., Indian Inst. Sci., Bangalore,
 560 012, India
 SOURCE: Inorganic Chemistry (1991), 30(2), 239-45
 CODEN: INOCHA; ISSN: 0020-1669
 DOCUMENT TYPE: Journal
 LANGUAGE: English

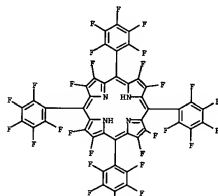
[illegible]

M(OBP) relative to M(TPF) is large (550 mV) compared to the shift in the oxidation potential (300 mV). These results were interpreted in terms of resonance and inductive interactions of the Br substituents.

17 131214-86-3P
 RL: SYN (Synthetic preparation); PREP (Preparation)
 (preparation and cyclic voltammetry and visible spectra and protonation
 of)
 RN 131214-86-3 CAPLUS
 CN 21H, 23H-Porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenyl-
 (SC1) (CA INDEX NAME)



L6 ANSWER 141 OF 140 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)
RN 121399-88-0 CAPLUS
CN 21H, 23H-Porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (SC1) (CA INDEX NAME)



PAGE 1-A

PAGE 2-A

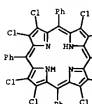
AB ANSWER 143 OF 148 CAPUS COPYRIGHT 2005 ACS ON STM
ACCESSION NUMBER: 1950156403 CAPUS
DOCUMENT NUMBER: 12316462
TITLE:
Highly chlorinated and perchlorinated
meso-tetraphenylporphyrins
AUTHOR(S):
Beyersdorf, Tilman; Kretschmer, Msternu Dolfin; Pfeiderer,
Lena; Doris
CORPORATE SOURCE:
Univ. British Columbia, Vancouver, BC, V6T
1W6, Can.
SOURCE:
Knapshute Cheme (1990), 10(2P), 1073-4
JOURN ANDAID INUM: 0044-292X
DOCUMENT TYPE:
Journal
LANGUAGE:
AB PFTU [HGL = meso-tetra-(6,6-dichlorophenyl)porphyrin,
meso-tetra-(6,6-trichlorophenyl)porphyrin] were chlorinated by Cl2 gas in
the presence of FeCl3. The products are meso-tetra-(6,6-dichloro-
dichloromethyl)octachloroporphyrin, tetra(perchlorophenyl)octachloroporphyrin
and tetrakis(chloromethyl)perchloroporphyrin. These compounds are
stable under acidic conditions and do not undergo further
decomposition of the macrocycle. FT (PFTU) and H277F were

partially chlorinated by Ni(II)-chlorosulfonamide (I). Ni(II)TP reacted with I in *o*-C₆H₄Cl₂ to give NiL₂ (NiL₂ = *o*-octachlorophenyl). Attempted chlorination of NiTP (M = Cu, Zn) led to ring opening. The effect of chlorination of NiTP (M = Cu, Zn) coordinated to Fe was studied on the oxidation and reduction potentials in the presence of Cl⁻ and Ag⁺.

120644-25-29 Ni(II) Formate, monohydrate; PREP (Preparation) (formation of, in denaturation of nickel complex)

120644-25-29 CAPLUS 2NiH₂-25-29 CAPLUS

2NiH₂-25-29-Forphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,18-tetraphenyl-(2,2,2-trifluoroethoxy)-



ACCESSION NUMBER:

1990:514910

DOCUMENT NUMBER:

113:114310

TITLE:

Highly selective bromination of tetramesitylporphyrin: an easy access to robust metalloporphyrins, H-BrTMP and H-BrTMPDS. Examples of application in catalytic oxygenation and oxidation reactions

Hoffmann, Pascal; Labat, Gilles; Robert, Anne; Meunier, Bernard

Lab. Chim. Coord., CNRS, Toulouse, 31077, Fr.

Tetrahedron Letters (1990), 31(14), 1391-4

CODEN: TETLEY ISSN: 0040-4039

Journal

DOCUMENT TYPE:

LANGUAGE:

English

AB

The H-bromosuccinimide bromination of the zinc derivative of meso-tetramesitylporphyrin, [Zn(TMP)], in MeOH under reflux in air, given meso-tetramesityl- β -octabromoporphyrinatocaine [Zn(BrTMP)], in high yield (60-75%). Furthermore, the sulfonation by oleum of the metal-free ligand BrTMPDS gives meso-tetrakis(3,5-disulfonatomesityl)- β -octabromoporphyrin, BrTMPDS (70-78%). These manganese and iron derivs., Mn(BrTMP)Cl, Fe(BrTMP)Cl, Mn(BrTMP)S, and Fe(BrTMP)S, are efficient catalysts in oxygen atom or electron transfer reactions.

IT

129006-48-0P

129006-48-1P

RI: ACT (Reactant); SPH (Synthetic Preparation); PREP (Preparation); RACT

(Reactant or reagent)

(Preparation and metalation of)

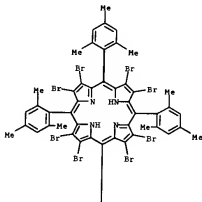
RN

129006-48-0

CN

21H,23H-porphine, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,4,6-trimethylphenyl)- (PCI) (CA INDEX NAME)

PAGE 1-A

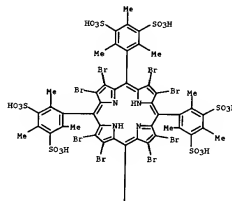


(Continued)

PAGE 2-A



PAGE 1-A



PAGE 2-A



ACCESSION NUMBER:

1988:457150

DOCUMENT NUMBER:

111:57150

TITLE:

New synthetic method of phenol from benzene catalyzed by perfluorinated hemo I

Tsuchiya, Shinji; Sano, Manabu

Inst. Ind. Sci., Univ. Tokyo, Tokyo, 106, Japan

Chemistry Letters (1988), (2), 263-6

CODEN: CHELTA ISSN: 0364-0222

Journal

DOCUMENT TYPE:

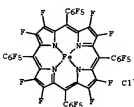
LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 111:57150

GI



1

AB New perfluorinated hemo I catalyzes the hydroxylation of C6H6 by H2O2 at room temperature and 1 atm pressure. The turnover for PhOH produced in 2 h

1A

55. 1 also catalyzes the epoxidation of cyclooctene by H2O2.

IT

121399-48-0

RI: PROC (Process)

(Of absorption of)

RN

121399-48-0

CN

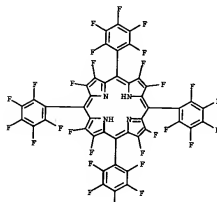
21H,23H-porphine, 2,3,7,8,12,13,17,18-octafluoro-5,10,15,20-tetrakis(pentafluorophenyl)- (PCI) (CA INDEX NAME)

1

PAGE 2-A

(Continued)

PAGE 1-A



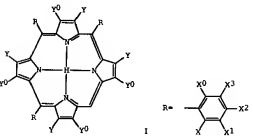
L6 ANSWER 146 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 11117144
 ACCESSION NUMBER: 1989:407144 CAPLUS
 DOCUMENT NUMBER:
 TITLE:

INVENTOR(S):
 Metallated tetraphenyl porphyrins, their nonmetallated precursors, and their use in the oxidation of lignin, alkanes, and alkenes
 Dolphin, David M.; Nakano, Taku; Kirk, Thomas Kent; Malcom, Theodore E.; Farrell, Roberta L.; Wijesekera, Tiak Famin
 COUNTRY: CA

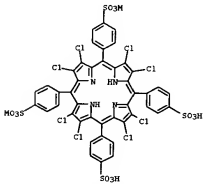
PATENT ASSIGNEE(S):
 SOURCE: PCT Int. Appl., 46 pp.
 CODE: P1X052
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNTRY: English
 PATENT INFORMATION: 1

PATENT NO.	XEND	DATE	APPLICATION NO.	DATE
WO 8807988	A1	19881020	WO 1988-051240	19880415
US 4617670	FI, AU, DK, FI, JP, KR, NO, SU			
US 4617670	BE, AT, DE, CH, FR, GB, IT, LU, NL, SE			
AU 8817075	A1	19881104	AU 1988-17075	19880415
US 4625841	A1	19911205	US 1988-181859	19880415
EP 363379	A	19900415	EP 1988-504116	19880415
EP 363379	BE	19900415		
FR, AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 0250886	T2	19890027	JP 1988-03781	19880415
CA 1308056	A1	19920929	CA 1988-564424	19880418
NO 886551	A	19900216	NO 1988-5571	19881215
DK 8807020	A1	19881216	DK 1988-7020	19881216
KA 9702638	B1	19970307	KA 1988-71690	19881217
FI 92402	B	19940720	FI 1989-4598	19891016
FI 92402	C	19941110		
US 5077394	A	19911231	US 1989-455663	19891221
PRIORITY APPL. INFO.:			US 1987-39366	A 19870417
			US 1989-181859	A3 19880415
			WO 1988-051240	A 19880415

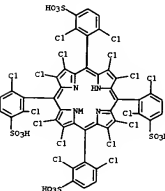
OTHER SOURCE(S):
 GI HABPAT 111:7144



L6 ANSWER 146 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)



FN 120644-27-1 CAPLUS
 CN Benzenesulfonic acid, 3,3',3'',3'''-(2,3,7,8,12,13,17,18-octachloro-21H,23H-porphine-5,10,15,20-tetrayl)tetraakis[2,4-dichloro- (SCI) (CA INDEX NAME)



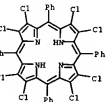
L6 ANSWER 146 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN (Continued)

AB Metallated porphyrins I (M = oxidation-sustaining transition metal, optionally with axial ligands X, XO = M, non-H2O-solubilizing electron-donating group, X1-X3 = H, electron-donating group Y, XO = M, F, Cl, Y and/or XO = H when none of X1-X3 is H2O-soluble; 1-3 of X1-X3 is H2O-soluble and 22 of X1-X3 is non-H2O-soluble electron-donating group when Y = XO = H; 22 of X1-X3 is H2O-soluble) and their salt forms are prepared for use as oxidation catalysts, especially for oxidation-degradation of lignin in wood or pulp, hydroxylation of (cyclo)alkenes, and epoxidation of (cyclo)alkenes. Chlorination of chloromono-tetra-(2,6-dichlorophenyl)porphyrinatoiron(III) using FeCl3 and Cl at 140 °C gave 88% of the 8-octachloro derivative, which underwent demetalation-sulfonation by fuming H2SO4 at 165 °C and reprecipitation by FeCl2.M2O in DMF to give I (H = Fe with axial Cl ligand, X = XO = Cl, X1 = X2 = M, X3 = SO2H, Y = H or Cl) (III). Oxidation of 2 g of I yielded a kappa value of 5.5 in the presence of 90 mg II, va. 17.6 without II.

IT 120644-28-9 120644-26-0 120644-27-1
 RU: RCT (Reactant); SP: (Synthetic preparation); PREP (Preparation); RAC (Reactant or reagent)
 (Preparation and metallation of)

RU 120644-25-9 CAPLUS

CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraphenyl- (SCI) (CA INDEX NAME)

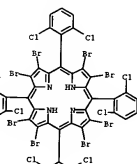


RU 120644-26-0 CAPLUS
 RU Benzenesulfonic acid, 4,4',4'',4'''-(2,3,7,8,12,13,17,18-octachloro-21H,23H-porphine-5,10,15,20-tetrayl)tetra- (SCI) (CA INDEX NAME)

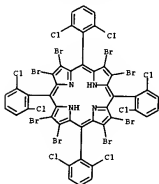
L6 ANSWER 147 OF 148 CAPLUS COPYRIGHT 2005 ACS ON STN
 11010703
 ACCESSION NUMBER: 1989:107073 CAPLUS
 DOCUMENT NUMBER: 11010703

TITLE: Perhalogenated tetraphenylporphyrins: stable catalysts of high turnover catalytic hydroxylation [Erratum to document cited in CA106(18):14610d]
 AUTHOR(S): Traylor, Teddy G.; Tsuchiya, Shunji
 CORPORATE SOURCE: Dep. Chem., Univ. California, La Jolla, CA, 92093, USA
 SOURCE: Inorganic Chemistry (1988), 27(24), 4520
 COUNTRY: INORGANIC CHEM: 0020-1669

DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB An error in Table I has been corrected. The error was not reflected in the abstract or the index entries.
 IT 107035-98-0p
 RU: SP (Synthetic preparation); PREP (Preparation)
 (Preparation of (Eratrum))
 RU 107035-95-0 CAPLUS
 CN 21H,23H-porphine, 2,3,7,8,12,13,17,18-octachloro-5,10,15,20-tetraakis(2,6-dichlorophenyl)- (SCI) (CA INDEX NAME)



16 ANSWER 148 OF 148 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1987:148310 CAPLUS
 DOCUMENT NUMBER: 106:148310
 TITLE: Halosubstituted tetraphenylbenzine: stable catalysts of high turnover catalytic hydroxylations
 AUTHOR(S): Traylor, Teddy G.; Tsuchiya, Shinji
 CORPORATE SOURCE: Dep. Chem., Univ. California, La Jolla, CA, 92093, USA
 SOURCE: Inorganic Chemistry (1987), 26(8), 1338-9
 CODEN: INCHAJ; ISSN: 0020-1669
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Bromination of tetrakis(2,6-dichlorophenyl)porphyrinatotriene affords the 2,3,7,8,12,13,17,18-octabromo compound (82i) which is converted into FeCl₃. This benza catalyzes high turnover, rapid hydroxylation of alkanes without catalyst destruction.
 IT 107035-95-00
 RL SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 IN 107035-95-0 CAPLUS
 CN 215,236-Tetraphenyl-, 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(2,6-dichlorophenyl)- (82i) (CA INDEX NAME)



=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

733.37

909.57

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-108.04

-108.04

STN INTERNATIONAL LOGOFF AT 15:26:54 ON 01 APR 2005